



(12) **Oversettelse av
europeisk patentskrift**

(11) **NO/EP 2154967 B1**

NORGE

(19) NO
(51) Int Cl.
C07D 239/42 (2006.01)
A61K 31/506 (2006.01)
A61P 35/00 (2006.01)

Patentstyret

(21)	Oversettelse publisert	2014.06.30
(80)	Dato for Den Europeiske Patentmyndighets publisering av det meddelte patentet	2014.03.05
(86)	Europeisk søknadsnr	08745881.6
(86)	Europeisk innleveringsdag	2008.04.15
(87)	Den europeiske søknadens Publiseringsdato	2010.02.24
(30)	Prioritet	2007.04.16, US, 911921 P
(84)	Utpekte stater	AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MT NL NO PL PT RO SE SI SK TR
(73)	Innehaver	Hutchison Medipharma Enterprises Limited, Offshore Group Chambers P.O. Box CB-12751, Nassau, BS-Bahamas
(72)	Oppfinner	SU, Wei-Guo, Hutchinson MediPharma Enterprises LimitedBuilding 4720 Cai Lun RoadZ.J. High-Tech Park, Shanghai, 201203, CN-Kina JIA, Hong, Hutchinson MediPharma Enterprises LimitedBuilding 4720 Cai Lun RoadZ.J. High-Tech Park, Shanghai, 201203, CN-Kina ZHANG, Weihang, Room 1703, Building 81599 Ding Xiang RoadPudong, Shanghai, CN-Kina CUI, Yumin, Room 701, Building 26259 Tian Deng Road, Shanghai, CN-Kina YAN, Xiaoqiang, 338, 1155 LaneXiu Yan RoadNan HuiZhangjiang High-Tech Park, Shanghai, CN-Kina REN, Yongxin, Hutchinson MediPharma Enterprises LimitedBuilding 4720 Cai Lun RoadZ.J. Hi-Tech Park, Shanghai, 201203, CN-Kina DUAN, Jifeng, Apt. 20-902, 888 Jin Xiu RoadPudong, Shanghai, CN-Kina SAI, Yang, Apt. 1401, Building 1801 Yinghua RoadPudong, Shanghai, CN-Kina
(74)	Fullmektig	Oslo Patentkontor AS, Postboks 7007 Majorstua , 0306 OSLO, Norge

(54)	Benevnelse	Pyrimidinderivater
(56)	Anførte publikasjoner	(CLOB) WO-A1-00/78731 WO-A1-01/29009 WO-A1-2004/014382 WO-A1-2005/026130 WO-A1-2006/053109 WO-A1-2006/060194 DE-A1-102004 044 556 US-A1- 2003 149 041 US-A1- 2004 092 750 US-A1- 2005 261 315 US-A1- 2006 247 263 US-A1- 2006 270 694 US-B1- 6 235 741

US-B1- 6 723 726

SISKO J T ET AL: "Potent 2-[(pyrimidin-4-yl)amine]-1,3-thiazole-5-carbonitrile-based inhibitors of VEGFR-2 (KDR) kinase" BIOORGANIC & MEDICINAL CHEMISTRY LETTERS, PERGAMON, ELSEVIER SCIENCE, GB LNKD- DOI:10.1016/J.BMCL.2005.11.089, vol. 16, no. 5, 1 March 2006 (2006-03-01), pages 1146-1150, XP025106308 ISSN: 0960-894X [retrieved on 2006-03-01]

BAMBOROUGH ET AL: "N-4-Pyrimidinyl-1H-indazol-4-amine inhibitors of Lck: Indazoles as phenol isosteres with improved pharmacokinetics" BIOORGANIC & MEDICINAL CHEMISTRY LETTERS, PERGAMON, ELSEVIER SCIENCE, GB LNKD- DOI:10.1016/J.BMCL.2007.04.029, vol. 17, no. 15, 13 April 2007 (2007-04-13), pages 4363-4368, XP022144705 ISSN: 0960-894X

VERMA S ET AL: "Substituted aminobenzimidazole pyrimidines as cyclin-dependent kinase inhibitors" BIOORGANIC & MEDICINAL CHEMISTRY LETTERS, PERGAMON, ELSEVIER SCIENCE, GB LNKD- DOI:10.1016/J.BMCL.2005.02.076, vol. 15, no. 8, 15 April 2005 (2005-04-15), pages 1973-1977, XP025314402 ISSN: 0960-894X [retrieved on 2005-04-15]

BAKGRUNN

[0001] Angiogenese er en fysiologisk prosess hvor det utvikles nye blodkar fra allerede eksisterende kar. I friske individer finner dette sted for å lege sår, dvs. gjenopprette blodstrømmen til vev etter skade.

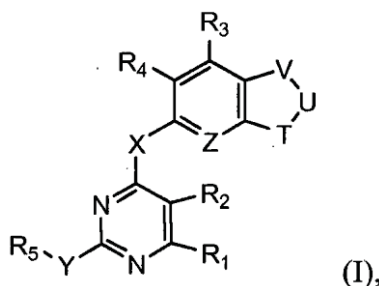
5 **[0002]** Overdreven vekst av blodkar kan utløses av visse patologiske tilstander så som kreft, aldersrelatert makuløs degenerasjon, rheumatoid artritt og psoriasis. Som et resultat forsyner nye blodkar sykelig vev og ødelegger normalt vev. I kreft lar nye blodkar også svulstceller bevege seg inn i sirkulasjonen og plassere seg i andre organer.

10 **[0003]** Vaskulær endotel vekstfaktor (VEGF), et homodimert glykoprotein, og dens receptorer, f.eks. kinaseinnføylesdomenereceptor (KDR), utgjør en viktig bane for angiogenese. Studier har vist at en inhibering av KDR førte til apoptose av endotelceller og dermed suppresjon av angiogenese. Se Rubin M. Tuder, *Chest*, 2000; 117: 281. KDR-inhibitorer er derfor potensielle kandidater for å behandle angiogenese-relaterte sykdommer.

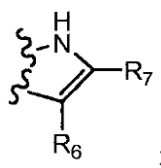
SAMMENFATNING

15 **[0004]** Oppfinnelsen baserer seg på oppdagelsen at et antall pyrimidinforbindelser inhiberer aktiviteten av KDR.

[0005] Ett trekk av oppfinnelsen vedrører pyrimidinforbindelser med den følgende formel (I):



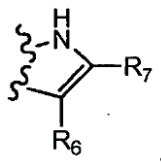
20 hvor X er O eller NH; Y er NH; Z er CR', hvor R' er H, halo eller alkyl; V, U, og T sammen representerer



25 R_1 , R_3 , R_4 og R_6 hver uavhengig er H, halo, nitro, amino, cyano, hydroksy, alkyl, alkenyl, alkynyl, aryl, cykloalkyl, heterocykloalkyl, heteroaryl, alkoksy, alkyltio, alkylkarbonyl, karboksy, alkoksykarbonyl, karbonylamino, sulfonylamino, aminokarbonyl eller aminosulfonyl; R_2 er H, halo, nitro, amino, hydroksy, alkyl, alkenyl, alkynyl, aryl, cykloalkyl, heterocykloalkyl, heteroaryl, alkoksy, alkyltio, alkylkarbonyl, karboksy, alkoksykarbonyl, karbonylamino, sulfonylamino, aminokarbonyl eller aminosulfonyl; R_5 er alkyl, cykloalkyl, heterocykloalkyl, aryl eller heteroaryl; og R_7 er alkyl.

30 **[0006]** Under henisning til formel (I), kjennetegnes én undergruppe av forbindelsene ved at R_1 , R_2 , R_3 og R_4 er H og R_5 er aryl eller heteroaryl, valgfritt substituert med halo, nitro, amino, cyano, hydroksy, alkyl, alkenyl, alkynyl, aryl, cykloalkyl, heterocykloalkyl, heteroaryl,

alkoksy, alkyltio, alkylkarbonyl, karboksy, alkoksykarbonyl, sulfonyl, karbonylamino, sulfonylamino, aminokarbonyl eller aminosulfonyl. En annen undergruppe kjennetegnes ved at X er O eller NH; Y er NH; V, U og T sammen representerer



5 hvor R_6 kan være H og R_7 kan være metyl; eller Z er CR' , hvor R' er H, halo eller alkyl.

[0007] Begrepet "alkyl" vedrører heri et rettkjedet eller forgrenet hydrokarbon som inneholder 1-10 karbonatomer. Eksempler på alkylgrupper omfatter, men er ikke begrenset til, metyl, etyl, *n*-propyl, *i*-propyl, *n*-butyl, *i*-butyl og *t*-butyl. Begrepet "alkoksy" viser til et -O-alkyl.

10 **[0008]** Begrepet "aryl" viser til et 6-karboners monocyklisk, 10-karboner bicyklisk eller 14-karboners tricyklisk aromatisk ringsystem hvor hver ring kan ha 1 til 4 substituenten. Eksempler på arylgrupper omfatter, men er ikke begrenset til, fenyl, naftyl og antracenyl.

[0009] Begrepet "cykloalkyl" viser til en mettet eller delvis umettet cyklisk hydrokarbongruppe som har 3 til 12 karboner. Eksempler på cykloalkylgrupper omfatter, men
15 er ikke begrenset til, cyklopropyl, cyklobutyl, cyklopentyl, cyklopentenyl, cykloheksyl, cykloheksenyl, cykloheptyl og cyklooktyl.

[0010] Begrepet "heteroaryl" viser til et aromatisk 5- til 8-leddet monocyklisk, 8- til 12-leddet bicyklisk eller 11- til 14-leddet tricyklisk ringsystem som har ett eller flere heteroatomer (så som O, N eller S). Eksempler på heteroarylgrupper omfatter pyridyl, furyl, imidazolyl,
20 benzimidazolyl, pyrimidinyl, tienyl, kinolinyl, indolyl og tiazolyl. Begrepet "heteroaralkyl" viser til en alkylgruppe som er substituert med en heteroarylgruppe.

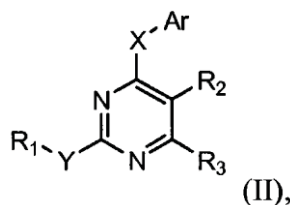
[0011] Begrepet "heterocykloalkyl" viser til et ikke-aromatisk 5- til 8-leddet monocyklisk, 8- til 12-leddet bicyklisk eller 11- til 14-leddet tricyklisk ringsystem som har ett eller flere heteroatomer (så som O, N eller S). Eksempler på heterocykloalkylgrupper omfatter,
25 men er ikke begrenset til, piperazinyl, pyrrolidinyl, dioksanyl, morfolinyl og tetrahydrofuranlyl. Heterocykloalkyl kan være en sakkaridring, f.eks. glukosyl.

[0012] Alkyl, cykloalkyl, heterocykloalkyl, aryl, heteroaryl og alkoksy som nevnes heri omfatter både substituerte og usubstituerte enheter. Substituenten velges fra halo, hydroksyl, amino, cyano, nitro, merkapt, alkoksykarbonyl, amido, karboksy, alkansulfonyl, alkylkarbonyl,
30 karbamido, karbamyl, karboksyl, tioureido, tiocyanato, sulfonamido, alkyl, alkenyl, alkynyl, alkyloksy, aryl, heteroaryl, cykloalkyl og heterocykloalkyl, hvor alkylet, alkenylet, alkynylet, alkyloksyen, arylet, heteroarylet, cykloalkylet og heterocykloalkylet kan være ytterligere substituert.

[0013] Pyrimidinforbindelsene beskrevet ovenfor omfatter også deres farmasøytisk
35 akseptable salter, hydrater og prodroger, hvor passende.

[0014] Et annet trekk av oppfinnelsen vedrører en forbindelse med formel (I) for anvendelse i en fremgangsmåte ved behandling av en angiogenese-relatert forstyrrelse (f.eks. kreft eller aldersrelatert makuløs degenerasjon). Fremgangsmåten omfatter å administrere en virksom mengde av én eller flere av de ovenfor beskrevne pyrimidinforbindelser til et individ
40 som har en slik forstyrrelse.

[0015] Heri beskrives også en fremgangsmåte ved inhibering av aktiviteten av kinaseinnføylesdomenereceptor ved å bringe receptoren i berøring med en virksom mengde av en pyrimidinforbindelse med formel (II):



hvor R_1 er H, alkyl, alkenyl, alkynyl, aryl, cykloalkyl, heterocykloalkyl eller heteroaryl; R_2 og R_3 hver uavhengig er H, halogen, nitro, amino, CN, hydroksy, alkyl, alkenyl, alkynyl, aryl, cykloalkyl, heterocykloalkyl, heteroaryl, alkoksy, alkylkarbonyl, karboksy eller alkoksykarbonyl; X og Y hver uavhengig er O, S eller NR_4 , hvor R_4 er H, alkyl, alkenyl, alkynyl, aryl, cykloalkyl, heterocykloalkyl, heteroaryl, alkylkarbonyl, alkoksykarbonyl, aminokarbonyl eller aminosulfonyl; og Ar er aryl eller heteroaryl.

[0016] Idet det vises til formel (II), er én undergruppe av forbindelsene kjennetegnet ved at Ar er indolyl, indazolyl, benzoimidazolyl eller benzoksazolyl; X er O eller NH og Y er NH; eller R_1 er aryl eller heteroaryl, valgfritt substituert med halo, nitro, amino, cyano, hydroksy, alkyl, alkenyl, alkynyl, aryl, cykloalkyl, heterocykloalkyl, heteroaryl, alkoksy, alkyltio, alkylkarbonyl, karboksy, alkoksykarbonyl, sulfonyl, karbonylamino, sulfonylamino, aminokarbonyl eller aminosulfonyl.

[0017] Eksempler 1-317 på forbindelser vises i avsnittet Detaljert beskrivelse i det følgende. Forbindelsene 18, 26, 27, 41, 45-47, 51, 60, 64, 74-76, 85, 88, 96, 98-100, 103, 110, 113, 114, 120, 123, 125-129, 131, 140-142, 147, 149, 151, 153, 155, 159-161, 171, 174, 176-178, 180, 182, 184, 204, 206, 207, 209, 210, 213, 215, 217, 222, 231-233, 235, 237, 238-240, 246-250, 254, 256, 259, 261, 262, 268, 270, 273-275, 277, 279, 281, 300, 306-308 og 310-317 vises som sammenlignende eksempler.

[0018] Heri beskrives også en fremgangsmåte ved inhibering av angiogenese, eller behandling av aldersrelatert makuløs degenerasjon, ved å administrere en virksom mengde av en pyrimidinforbindelse med formel (II) slik den ble beskrevet ovenfor, til et individ som har behov for det.

[0019] Innen rammen for oppfinnelsen er også (1) en sammensetning som inneholder én eller flere av pyrimidinforbindelsene med formel (I) som ble beskrevet ovenfor, og en farmasøytisk akseptabel bærer, for anvendelse ved behandling av en angiogenese-relatert forstyrrelse (f.eks. kreft eller aldersrelatert makuløs degenerasjon) og (2) anvendelse av én eller flere av pyrimidinforbindelsene med formel (I) ved fremstilling av et legemiddel for behandling av forstyrrelsen.

[0020] Detaljene rundt én eller flere utførelser av oppfinnelsen fremgår av den følgende beskrivelse. Andre trekk, formål og fordeler med oppfinnelsen vil bli åpenbare utfra beskrivelsen og kravene.

DETALJERT BESKRIVELSE

[0021] Forbindelsene som ble beskrevet ovenfor, kan syntetiseres ut fra handelstilgjengelige utgangsstoffer ved bruk av fremgangsmåter som er velkjent innen faget. For eksempel kan man erstatte utgående grupper (f.eks. klorid, *p*-TsO, MeS eller MeSO₂) i aktive N2- og N4-posisjoner av en egnet pyrimidinforbindelse med nukleofile grupper så som amino eller hydroksyl, via f.eks. en Buchwald-Hartwig-koblingsreaksjon. Erstatningen kan utføres først i enten N2-posisjon eller N4-posisjon.

[0022] De således erholdte forbindelser kan modifiseres ytterligere i sine perifere posisjoner for å gi de ønskede forbindelser.

[0023] Kjemiske syntesetransformasjoner som er nyttige ved syntetisering av ønskede pyrimidinforbindelser beskrives for eksempel i R. Larock, *Comprehensive Organic Transformations*, VCH Publishers (1989); T.W. Greene og P.G.M. Wuts, *Protective Groups in Organic Synthesis*, 3. utg., John Wiley and Sons (1999); L. Fieser og M. Fieser, *Fieser and Fieser's Reagents for Organic Synthesis*, John Wiley and Sons (1994); og L. Paquette, utg., *Encyclopedia of Reagents for Organic Synthesis*, John Wiley and Sons (1995) og senere utgaver derav.

[0024] Før bruk kan forbindelsene renses ved kolonnekromatografi, høytytelses væskerkromatografi, krystallisasjon eller andre egnede metoder.

[0025] Pyrimidinforbindelsene som ble beskrevet ovenfor inhiberer, når de kommer i berøring med KDR, denne receptors aktivitet. En virksom mengde av én eller flere av disse forbindelser kan derfor brukes til å inhibere angiogenese og behandle et individ som har en angiogenese-relatert forstyrrelse.

[0026] Begrepet "en virksom mengde" viser til den mengde av en pyrimidinforbindelse som er nødvendig for å gi den tilsiktede virkning i individet. Virksomme mengder kan variere, slik en fagperson vil innse, avhengig av administrasjonsruten, bruken av ekspiensere og muligheten for bruk i forbindelse med andre midler. Begrepet "behandling" viser til å administrere én eller flere av de ovenfor beskrevne pyrimidinforbindelser til et individ som har en angiogenese-relatert forstyrrelse, eller har et symptom for forstyrrelsen, eller har en tilbøyelighet for forstyrrelsen, med det formål å helbrede, lege, lindre, mildne, endre, avhjelpe, bedre, gjøre bedre eller påvirke forstyrrelsen, symptomene på forstyrrelsen eller tilbøyeligheten for forstyrrelsen.

[0027] For å utøve metoden kan en sammensetning som inneholder én eller flere av pyrimidinforbindelsene ifølge oppfinnelsen, administreres oralt, parenteralt, via inhalasjonsspray eller via en implantert beholder. Begrepet "parenteralt" omfatter slik som det brukes heri, subkutane, intrakutane, intravenøse, intramuskulære, intraartikulære, intraarterielle, intrasynoviale, intrasternale, intratekale, intralesjonale og intrakraniale injeksjons- eller infusjonsteknikker.

[0028] En oral sammensetning kan være en hvilken som helst oralt akseptabel doseringsform, omfattende, men ikke begrenset til, tabletter, kapsler, emulsjoner og vandige suspensjoner, dispersjoner og oppløsninger. Vanlige brukte bærere for tabletter omfatter laktose og maisstivelse. Smøremidler, så som magnesiumstearat, tilsettes typisk også til tabletter. For oral administrasjon i kapselform omfatter nyttige fortynningsmidler laktose og tørket maisstivelse. Når vandige suspensjoner eller emulsjoner administreres oralt, kan den aktive ingrediens suspenderes eller løses opp i en oljete fase kombinert med emulgerings- eller suspensjonsmidler. Om ønsket kan det tilsettes visse søtstoffer, smakstoffer eller fargestoffer.

[0029] En steril, injiserbar sammensetning (f.eks. vandig eller oljete suspensjon) kan formuleres i henhold til teknikker som er kjent innen faget, ved bruk av egnede dispersjons- eller fuktemidler (så som for eksempel Tween 80) og suspensjonsmidler. Det sterile, injiserbare preparat kan også være en steril, injiserbar oppløsning eller suspensjon i et ikke-toksisk, parenteralt akseptabelt fortynnings- eller løsemiddel, for eksempel som en oppløsning i 1,3-butandiol. Blant de akseptable vehikler og løsemidler som kan brukes, er mannitol, vann, Ringers oppløsning og isotonisk natriumkloridoppløsning. I tillegg brukes konvensjonelt sterile, ikke-flyktige oljer som løsemiddel eller suspensjonsmedium (f.eks. syntetiske mono- eller diglycider). Fettsyrer så som oleinsyre og dens glyceridderivater er nyttige ved fremstilling av injiserbare stoffer, slik som også naturlige, farmasøytisk akseptable oljer, så som olivenolje eller ricinusolje, spesielt i deres polyoksyetylerter versjoner. Disse oljeoppløsninger

eller -suspensjoner kan også inneholde et fortynningsmiddel eller dispersjonsmiddel av en langkjedet alkohol, eller karboksymetylcellulose eller lignende dispersjonsmidler.

5 **[0030]** En sammensetning til inhalasjon kan fremstilles i henhold til teknikker som er velkjent innen faget farmasøytisk formulering, og kan fremstilles som oppløsning i saltvann, ved bruk av benzylalkohol eller andre egnede konserveringsmidler, absorpsjonsfremmere for å forbedre biotilgjengeligheten, fluorkarboner og/eller andre løseliggjørende eller dispergerende midler som er kjent innen faget.

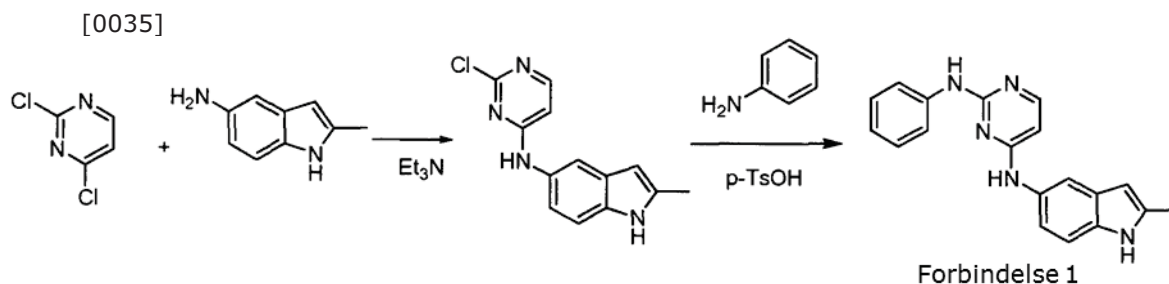
10 **[0031]** En topisk sammensetning kan formuleres i form av olje, krem, losjon, salve og lignende. Egnede bærere for sammensetningen omfatter vegetabiliske eller mineralske oljer, hvit petrolatum (hvit vaselin), forgrenede fetter eller oljer, animalske fetter og alkoholer med høy molekylvekt (over C12). De foretrukne bærere er slike som den aktive ingrediens kan løses opp i. Emulgeringsmidler, stabiliseringsmidler, fuktemidler og antioksidanter kan også innlemmes, slik som også midler som gir farge eller duft, om ønsket. I tillegg kan det i disse topiske formuleringer brukes midler for forsterkning av den transdermale penetrasjon. Eksempler på
15 slike forsterkende midler finnes i US-patentene 3,989,816 og 4,444,762. Kremer formuleres fortrinnsvis fra en blanding av mineralolje, selvemulgerende bivoks og vann, hvor en blanding av den aktive ingrediens, løst opp i en liten mengde olje, så som mandelolje, blandes sammen med. Et eksempel på en slik krem er en som omfatter ca. 40 deler vann, ca. 20 deler bivoks, ca. 40 deler mineralolje og ca. 1 del mandelolje. En salve kan formuleres ved å blande en
20 oppløsning av den aktive ingrediens i en vegetabilisk olje, så som mandelolje, med varm vaselin og la blandingen avkjøles. Et eksempel på en slik salve er en som omfatter ca. 30 vekt% mandelolje og ca. 70 vekt% hvit vaselin.

[0032] En bærer i en farmasøytisk sammensetning på være "akseptabel" i den forstand at den er kompatibel med aktive ingredienser i formuleringen (og fortrinnsvis har evnen til å
25 stabilisere den) og ikke er skadelig for individet som skal behandles. For eksempel kan løseliggjørende midler, så som cyklodekstriner (som danner spesifikke, mer løselige komplekser med én eller flere av pyrimidinforbindelsene heri), brukes som farmasøytiske eksipienser for å levere den aktive ingrediens. Eksempler på andre bærere omfatter kolloidalt silisiumdioksid, magnesiumstearat, cellulose, natriumlaurylsulfat og D&C Yellow # 10.

30 **[0033]** Egnede *in vitro*-assayer kan brukes for å foreløpig bedømme virkningen av de ovenfor beskrevne pyrimidinforbindelser i å inhibere aktiviteten av KDR eller inhibere aktiviteten av VEGF. Forbindelsene kan undersøkes nærmere for sin virkning ved behandle en angiogenese-relatert forstyrrelse, ved bruk av *in vivo*-assayer. For eksempel kan forbindelsene administreres til et dyr (for eksempel en musemodell) som har kreft, og deres terapeutiske
35 virkning kan deretter bedømmes. Basert på resultatene kan det også bestemmes passende doseringsområder og administrasjonsruter.

[0034] Uten ytterligere utdypning tror man at beskrivelsen ovenfor er tilstrekkelig til å kunne utøve foreliggende oppfinnelse. De følgende eksempler skal derfor forstås som å være rent illustrative, og ikke på noen måte begrensende for resten av beskrivelsen.

Eksempel 1: Syntese av N4-(2-metyl-1H-indol-5-yl)-N2-fenylpyrimidin-2,4-diamin (forbindelse 1)



5 **[0036]** Et₃N (1 mmol) ble tilsatt til en oppløsning av 2,4-diklorpyrimidin (1 mmol) og 5-amino-2-metylindol (1 mmol) i 5 ml EtOH. Reaksjonsblandingen ble tilbakeløpsbehandlet i 5 timer. Etter fjerning av løsemidlet under vakuum og tilsetning av H₂O, ble blandingen ble ekstrahert med EtOAc. De organiske sjikt ble slått sammen, vasket med mettet NaCl-oppløsning, tørket over vannfritt Na₂SO₄ og inndampet under vakuum. Det dannede residuum ble renset ved kolonnekromatografi for å gi N-(2-klorpyrimidin-4-yl)-2-metyl-1H-indol-5-amin i et utbytte på 80%.

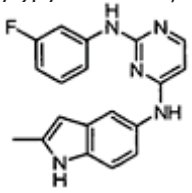
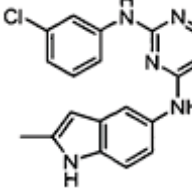
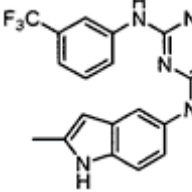
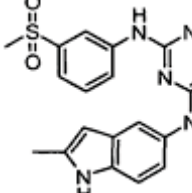
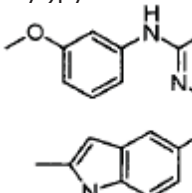
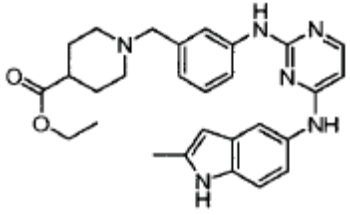
[0037] N-(2-Klorpyrimidin-4-yl)-2-metyl-1H-indol-5-amin (0,1 mmol) og anilin (0,1 mmol) ble løst opp i 0,5 ml DMF. Til dette tilsatte man p-TsOH-monohydrat (0,2 mmol). Reaksjonsblandingen ble omrørt ved 60°C i 5 timer, fortynnet med vann og ekstrahert med etylacetat. Det organiske sjikt ble vasket sekvensielt med vann og saltvann, tørket over vannfritt Na₂SO₄ og inndampet. Det dannede residuum ble renset ved kolonnekromatografi for å gi tittelforbindelsen i et utbytte på 85%.

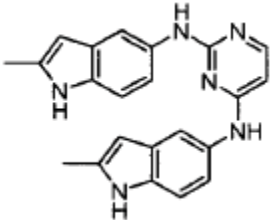
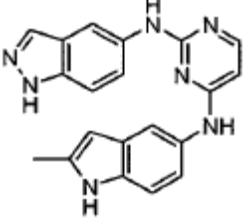
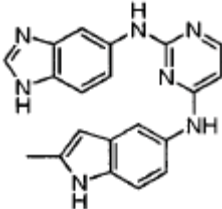
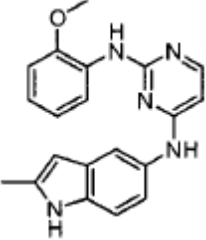
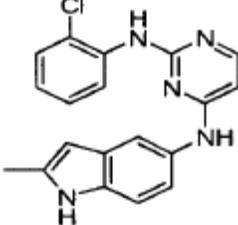
20 **[0038]** ¹H NMR (CD₃OD, 400 M Hz): δ 7,831 (d, J=6,0 Hz, 1H), 7,633 (t, J=8,0-7,6 Hz, 3H), 7,262 (t, J=8,4-7,6 Hz, 3H), 7,064 (d, J=6,8 Hz, 1H), 6,995 ((t, J=7,6-7,2 Hz, 1H), 6,133 (t, J=6,4-2,0 Hz, 2H), 2,439 (s, 3H); MS (m/e): 384,2 (M+1).

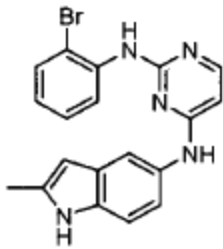
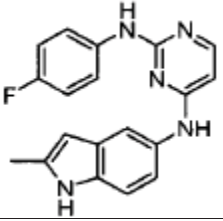
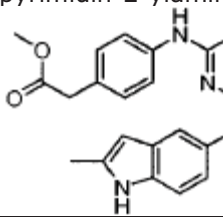
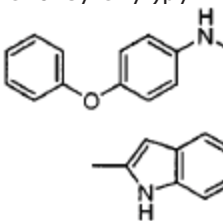
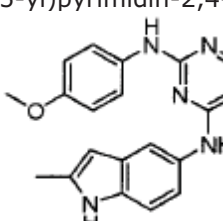
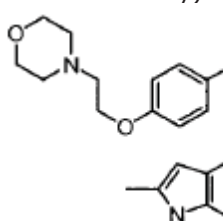
Eksempel 2-283: Syntese av forbindelsene 2-283

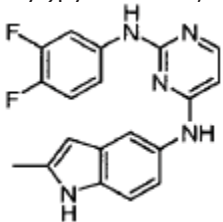
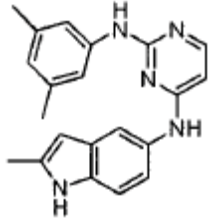
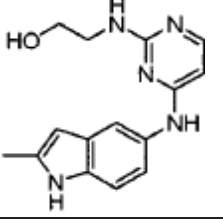
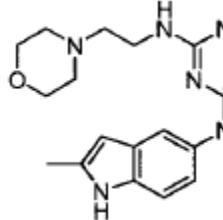
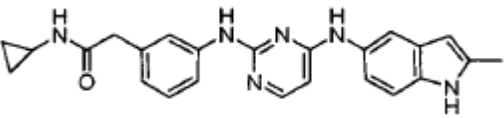
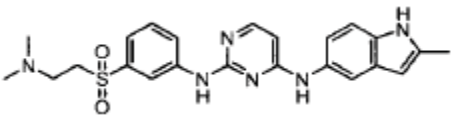
[0039] Hver av forbindelsene 2-283 ble syntetisert på lignende måte som hva som ble beskrevet i eksempel 1.

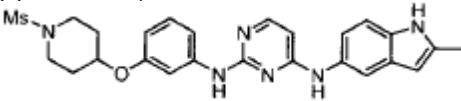
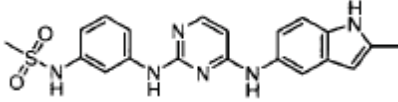
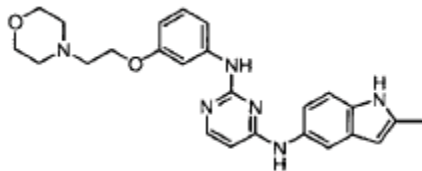
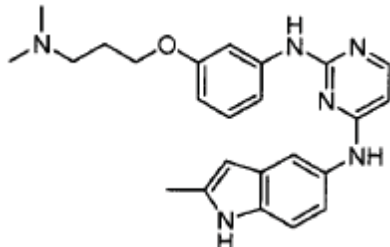
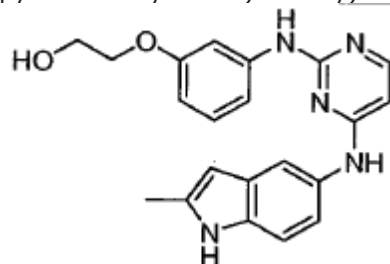
Forbindelse	Navn/struktur	¹ H NMR (400 M Hz, δ ppm) / MS
2	N2-(3-etynylfenyl)-N4-(2-metyl-1H-indol-5-yl)pyrimidin-2,4-diamin 	(CD ₃ OD): 7,848 (d, J=6,8 Hz, 1H), 7,730 (s, 1H), 7,704 (d, J=8,0 Hz, 1H), 7,507 (s, 1H), 7,275 (d, J=8,0 Hz, 1H), 7,200 (t, J=8,0 Hz, 1H), 7,093-7,036 (m, 2H), 6,639 (m, 2H), 2,425 (s, 3H); MS (m/e): 340,4 (M+1)
3	N2-(3-bromfenyl)-N4-(2-metyl-1H-indol-5-yl)pyrimidin-2,4-diamin 	(CD ₃ OD): 7,879 (s, 1H), 7,784 (d, J=6,0 Hz, 1H), 7,437 (br, 1H), 7,373 (s, 1H), 7,255 (d, J=8,8 Hz, 1H), 7,079 (br, 2H), 6,968 (d, J=8,4 Hz, 1H), 6,133 (s, 1H), 6,041 (d, J=6,4 Hz, 1H), 2,400 (s, 3H); MS(m/e): 394,3 (M)

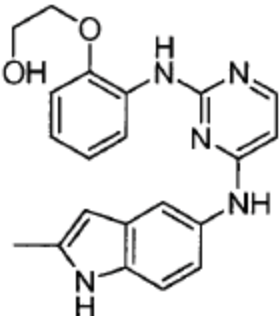
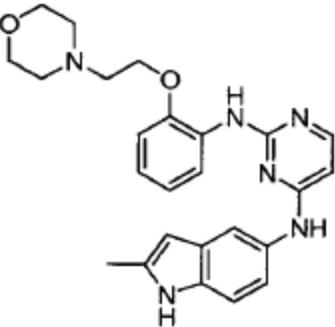
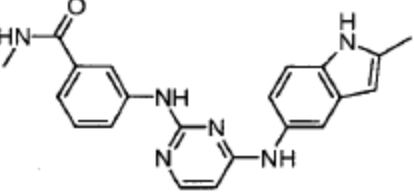
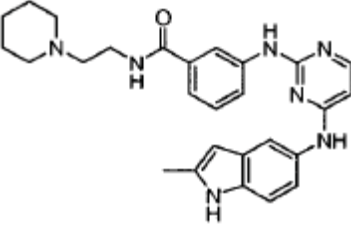
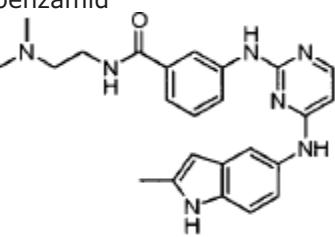
4	N2-(3-fluorfenyl)-N4-(2-metyl-1H-indol-5-yl)pyrimidin-2,4-diamin 	(CD ₃ OD): 7,923 (s, 1H), 7,759 (d, J=6,0 Hz, 1H), 7,641 (d, J=8,0 Hz, 1H), 7,397 (s, 1H), 7,247 (d, J=8,4 Hz, 1H), 7,179-7,053 (m, 1H), 6,963 (d, J=8,4 Hz, 1H), 6,575 (t, J=8,0 Hz, 1H), 6,125 (s, 1H), 6,044 (d, J=6,0 Hz, 1H), 2,395 (s, 3H); MS (m/e): 334,2 (M+1)
5	N2-(3-klorfenyl)-N4-(2-metyl-1H-indol-5-yl)-pyrimidin-2,4-diamin 	(CD ₃ OD): 7,838 (d, J=6,8 Hz, 1H), 7,746 (s, 1H), 7,526 (br, 2H), 7,298 (d, J=8,4 Hz, 1H), 7,212 (t, J=8,0 Hz, 1H), 7,102 (d, J=8,4 Hz, 1H), 7,001 (d, J=8,0 Hz, 1H), 6,217 (d, J=6,0 Hz, 1H), 6,133 (s, 1H), 2,436 (s, 3H); MS(m/e): 350,2 (M+1)
6	N4-(2-metyl-1H-indol-5-yl)-N2-(3-(trifluormetyl)fenyl)pyrimidin-2,4-diamin 	(CD ₃ OD): 8,045 (d, J=7,2 Hz, 1H), 7,788 (d, J=6,0 Hz, 2H), 7,529 (s, 1H), 7,366 (d, J=6,8 Hz, 1H), 7,276 (d, J=8,4 Hz, 1H), 7,228 (d, J=7,2 Hz, 1H), 7,083 (d, J=1,2 Hz, 1H), 6,190 ((d, J=6,4 Hz, 1H), 6,115 (s, 1H), 2,440 (s, 3H), MS(m/e): 384,2 (M+1)
7	N4-(2-metyl-1H-indol-5-yl)-N2-(3-(metylsulfonyl)fenyl)pyrimidin-2,4-diamin 	(CD ₃ OD): 11,471 (s, 1H), 9,461 (s, 1H), 9,364 (s, 1H), 8,441 (s, 1H), 8,236 (s, 1H), 7,988 (d, J=5,6 Hz, 1H), 7,396 (M, 5H), 7,303 (d, J=8,4 Hz, 1H), 6,255 (d, J=5,6 Hz, 1H), 3,111 (s, 3H), 2,456 (s, 3H) .MS(m/e): 393,2 (M+1)
8	N2-(3-metoksylfenyl)-N4-(2-metyl-1H-indol-5-yl)pyrimidin-2,4-diamin 	(CD ₃ OD): 8,050 (s, 1H), 7,943 (d, J=6,0 Hz, 1H), 7,440-7,362 (m, 3H), 7,293 (s, 1H), 7,223 (t, J=8,0 Hz, 2H), 7,122 (d, J=7,6 Hz, 1H), 7,0211 (d, J=6,8 Hz, 1H), 6,808 (s, 1H), 6,680 (d, J=6,4 Hz, 1H), 6,222 (s, 1H), 6,068 (d, J=5,6 Hz, 1H), 3,790 (s, 3H), 2,472 (s, 3H); MS(m/e): 345,9 (M+1)
9	etyl-1-(3-(4-(2-metyl-1H-indol-5-ylamino)-pyrimidin-2-ylamino)benzyl)piperidin-4-karboksylat 	(CD ₃ OD): 8,019 (s, 1H), 7,889 (d, J=5,6 Hz, 1H), 7,554 (s, 1H), 7,399 (d, J=8,0 Hz, 1H), 7,328 (d, J=8,4 Hz, 1H), 7,278 (t, J=8,0 Hz, 1H), 7,101 (d, J=8,0 Hz, 1H), 7,002 (d, J=7,2 Hz, 1H), 6,180 (d, J=6,0 Hz, 1H), 6,141 (s, 1H), 4,166 (q, J=7,2 Hz, 1H), 3,586 (s, 2H), 2,973-2,943 (m, 2H), 2,462 (s, 3H), 2,316 (br, 1H), 2,089 (m, 2H), 1,939-1,885 (m, 2H), 1,741-1,653 (m, 2H), 1,272 (t, J=7,2 Hz, 2H); MS(m/e): 485,4 (M+1)

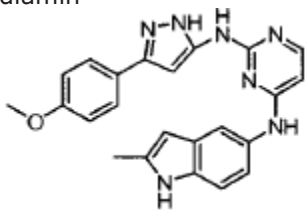
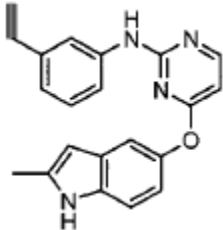
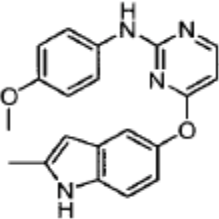
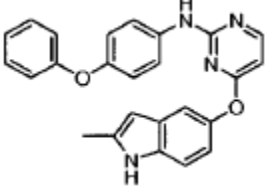
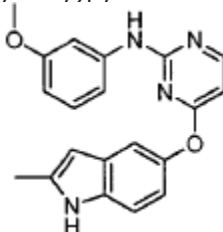
10	N2,N4-bis(2-metyl-1H-indol-5-yl)pyrimidin-2,4-diamin 	(CD ₃ OD): 7,675 (d, <i>J</i> =6,4 Hz, 1H), 7,625 (s, 1H), 7,577 (br, 1H), 7,266-7,219 (m, 2H), 7,068-7,051 (m, 1H), 6,116 (d, <i>J</i> =6,0 Hz, 1H), 6,072 (s, 1H), 6,014 (s, 1H), 2,435 (s, 3H), 2,425 (s, 3H); MS(<i>m/e</i>): 369,3 (M+1)
11	N2-(1H-indazol-5-yl)-N4-(2-metyl-1H-indol-5-yl)pyrimidin-2,4-diamin 	(CD ₃ OD): 12,385 (s, 1H), 10,928 (s, 1H), 9,120 (s, 1H), 9,003 (s, 1H), 8,259 (s, 1H), 7,920 (d, <i>J</i> =6,0 Hz, 1H), 7,758 (s, 1H), 7,667 (s, 1H), 7,541 (d, <i>J</i> =8,8 Hz, 2H), 7,399 (d, <i>J</i> =8,8 Hz, 1H), 7,242 (d, <i>J</i> =8,8 Hz, 1H), 7,151 (d, <i>J</i> =8,8 Hz, 1H), 6,142 (d, <i>J</i> =6,0 Hz, 1H), 6,017 (s, 1H), 2,389 (s, 3H), MS (<i>m/e</i>): 356,3 (M+1)
12	N2-(1H-benzo[d]imidazol-5-yl)-N4-(2-metyl-1H-indol-5-yl)pyrimidin-2,4-diamin 	(CD ₃ OD): 10,853 (s, 1H), 9,033 (s, 1H), 8,956 (s, 1H), 8,077 (br, 2H), 7,925 (d, <i>J</i> =6,0 Hz, 1H), 7,736 (s, 1H), 7,533 (d, <i>J</i> =8,0 Hz, 1H), 7,444 (d, <i>J</i> =8,8 Hz, 1H), 7,214-7,144 (m, 2H), 6,131 (d, <i>J</i> =6,0 Hz, 1H), 6,020 (s, 1H), 2,372 (s, 3H); MS(<i>m/e</i>): 356,3 (M+1)
13	N2-(2-metoksyfenyl)-N4-(2-metyl-1H-indol-5-yl)pyrimidin-2,4-diamin 	(CD ₃ OD): 8,496 (s, 1H), 8,002 (d, <i>J</i> =6,0 Hz, 2H), 7,446 (s, 1H), 7,047 (dd, <i>J</i> =8,8 Hz, <i>J</i> =2,4 Hz, 1H), 6,981-6,957 (m, 2H), 6,913-6,771 (m, 1H), 6,889 (s, 1H), 6,243 (s, 1H), 6,083 (d, <i>J</i> =6,0 Hz, 1H), 3,910 (s, 3H), 2,490 (s, 3H), MS(<i>m/e</i>): 346,2 (M+1)
14	N2-(2-klorfenyl)-N4-(2-metyl-1H-indol-5-yl)pyrimidin-2,4-diamin 	(CD ₃ OD): 8,385 (d, <i>J</i> =6,0 Hz, 1H), 7,914 (s, 1H), 7,849 (s, 1H), 7,325 (d, <i>J</i> =7,6 Hz, 1H), 7,237 (d, <i>J</i> =8,4 Hz, 1H), 7,182 (t, <i>J</i> =7,6 Hz, 1H), 6,945-6,870 (m, 2H), 6,119 (s, 1H), 6,070 (d, <i>J</i> =6,0 Hz, 1H), 2,397 (s, 3H); MS(<i>m/e</i>): 350,1 (M+1)

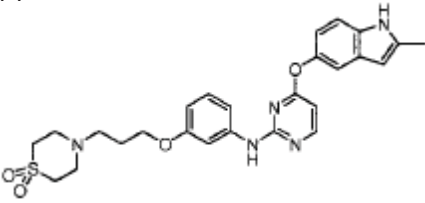
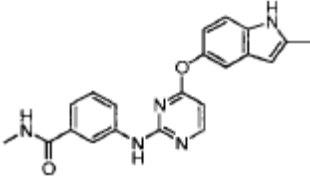
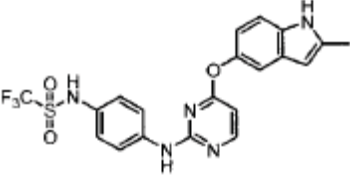
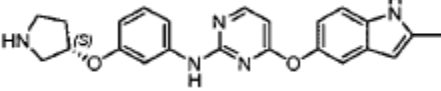
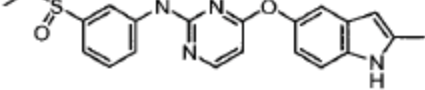
15	N2-(2-bromfenyl)-N4-(2-metyl-1H-indol-5-yl)pyrimidin-2,4-diamin 	(CD ₃ OD): 10,860 (s, 1H), 9,204 (s, 1H), 8,140 (d, <i>J</i> =8,4 Hz, 1H), 7,916 (d, <i>J</i> =5,6 Hz, 2H), 7,651 (d, <i>J</i> =7,6 Hz, 2H), 7,334 (t, <i>J</i> =7,6 Hz, 1H), 7,184 (d, <i>J</i> =8,8 Hz, 1H), 7,038 (br, 2H), 6,192 (d, <i>J</i> =6,0 Hz, 1H), 6,012 (s, 1H), 2,369 (s, 3H); MS(<i>m/e</i>): 394,3 (M)
16	N2-(4-fluorfenyl)-N4-(2-metyl-1H-indol-5-yl)pyrimidin-2,4-diamin 	(CD ₃ OD): 10,889 (s, 1H), 9,256 (s, 1H), 9,245 (s, 1H), 7,966 (d, <i>J</i> =5,6 Hz, 1H), 7,752 (m, <i>J</i> =8,4-3,6 Hz, 2H), 7,236 (d, <i>J</i> =5,4 Hz, 1H), 7,133 (m, <i>J</i> =8,4-3,6 Hz, 3H), 6,086 (d, <i>J</i> =5,6 Hz, 1H), 6,050 (s, 1H), 2,402 (s, 3H); MS(<i>m/e</i>): 334,2 (M+1)
17	metyl2-(4-(4-(2-metyl-1H-indol-5-ylamino)-pyrimidin-2-ylamino)fenyl)acetat 	(CD ₃ OD): 10,907 (s, 1H), 9,132 (s, 1H), 9,015 (s, 1H), 7,914 (s, 1H), 7,713 (d, <i>J</i> =6 Hz, 1H), 7,498 (d, <i>J</i> =6,8 Hz, 1H), 7,217 (d, <i>J</i> =7,2 Hz, 1H), 7,127 (m, 4H), 6,149 (d, <i>J</i> =6 Hz, 1H), 6,067 (s, 1H), 2,384 (s, 3H), 2,272 (s, 3H), 1,288 (s, 2H), MS(<i>m/e</i>): 387,2 (M+1)
18	N4-(2-metyl-1H-indol-5-yl)-N2-(4-fenoksyfenyl)pyrimidin-2,4-diamin 	(CD ₃ OD): 10,855 (s, 1H), 9,098 (s, 1H), 9,065 (s, 1H), 7,909 (d, <i>J</i> =5,6 Hz, 1H), 7,786 (d, <i>J</i> =8 Hz, 2H), 7,365 (t, <i>J</i> =7,6 Hz, 2H), 7,346 (s, 1H), 7,201 (d, <i>J</i> =8,8 Hz, 1H), 7,086 (m, 2H), 6,962 (d, 8 Hz, 2H), 6,895 (d, <i>J</i> =8 Hz, 2H), 6,137 (d, <i>J</i> =5,6 Hz, 1H), 6,021 (s, 1H), 2,331 (s, 3H), MS(<i>m/e</i>): 407,5 (M+1)
19	N2-(4-metoksyfenyl)-N4-(2-metyl-1H-indol-5-yl)pyrimidin-2,4-diamin 	(CD ₃ OD): 11,097 (s, 1H), 9,479 (s, 1H), 9,243 (s, 1H), 8,090 (d, <i>J</i> =6 Hz, 1H), 7,923 (s, 1H), 7,822 (m, 2H), 7,420 (d, 8,8 Hz, 1H), 7,307 (s, 1H), 7,025 (d, <i>J</i> =8,8 Hz, 2H), 6,340 (m, 1H), 6,265 (s, 1H), 3,941 (s, 3H), 2,591 (s, 3H); MS(<i>m/e</i>): 345,4 (M+1)
20	N4-(2-metyl-1H-indol-5-yl)-N2-(4-(2-morfolinoetoksy)fenyl)pyrimidin-2,4-diamin 	(CD ₃ OD): 10,899 (s, 1H), 9,074 (s, 1H), 8,823 (s, 1H), 7,869 (d, <i>J</i> =6 Hz, 1H), 7,713 (s, 1H), 7,621 (d, <i>J</i> =8,8 Hz, 2H), 7,200 (d, <i>J</i> =8,4 Hz, 1H), 7,080 (s, 1H), 6,784 (m, 2H), 6,101 (d, <i>J</i> =5,6 Hz, 1H), 6,025 (s, 1H), 4,034 (t, <i>J</i> =5,6 Hz, 2H), 3,585 (t, <i>J</i> =4,8 Hz, 4H), 2,679 (t, <i>J</i> =5,6 Hz, 2H), 2,475 (t, <i>J</i> =6,4 Hz, 4H), 2,375 (s, 3H); MS: 444,5 (M+1)

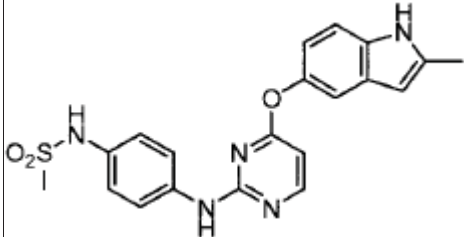
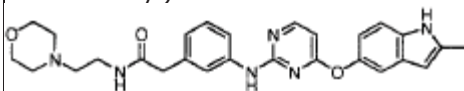
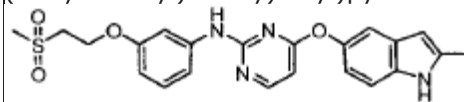
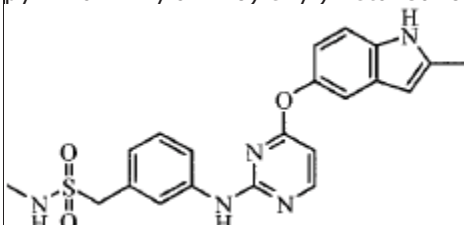
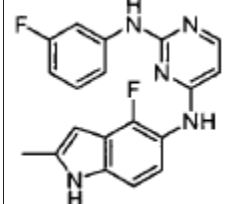
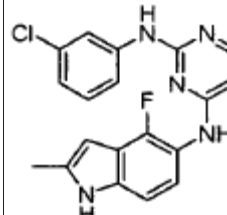
21	N2-(3,4-difluorfenyl)-N4-(2-metyl-1H-indol-5-yl)pyrimidin-2,4-diamin 	(CD ₃ OD): 11,234 (s, 1H), 9,886 (s, 1H), 9,754 (s, 1H), 7,966 (d, <i>J</i> =5,6 Hz, 2H), 7,752 (s, 1H), 7,393 (m, <i>J</i> =8,4-3,6 Hz, 3H), 7,133 (d, <i>J</i> =5,6 Hz, 1H), 6,251 (d, <i>J</i> =4,5 Hz, 1H), 6,1,9 (s, 1H), 2,402 (s, 3H); MS(<i>m/e</i>): 352,2 (M+1)
22	N2-(3,5-dimetylfenyl)-N4-(2-metyl-1H-indol-5-yl)pyrimidin-2,4-diamin 	(CD ₃ OD): 10,863 (s, 1H), 9,051 (s, 1H), 8,841 (s, 1H), 7,905 (d, <i>J</i> =6 Hz, 1H), 7,633 (s, 1H), 7,361 (s, 1H), 7,207 (m, 2H), 6,507 (s, 1H), 6,118 (d, <i>J</i> =5,6 Hz, 1H), 6,032 (s, 2H), 2,370 (s, 3H), 2,171 (s, 6H); MS(<i>m/e</i>): 343,4 (M+1).
23	2-(4-(2-metyl-1H-indol-5-ylamino)pyrimidin-2-ylamino)etanol 	(CD ₃ OD): 7,939 (d, <i>J</i> =8,0 Hz, 1H), 6,923 (d, <i>J</i> =6,8 Hz, 2H), 6,437 (s, 1H), 6,328 (d, <i>J</i> =7,6 Hz, 2H), 6,218 (s, 1H), 6,231 (d, <i>J</i> =5,6 Hz, 1H), 5,726 (d, <i>J</i> =7,2 Hz, 1H), 3,735 (t, <i>J</i> =7,2-6,4 Hz, 3H), 3,225 (t, <i>J</i> =6,8-5,6 Hz, 3H), 2,247 (s, 3H); MS(<i>m/e</i>): 384,1 (M+1)
24	N4-(2-metyl-1H-indol-5-yl)-N2-(2-morfolinoetyl)pyrimidin-2,4-diamin 	(CD ₃ OD): 7,796 (d, <i>J</i> =6,0 Hz, 1H), 7,497 (s, 1H), 7,246 (d, <i>J</i> =8,8 Hz, 1H), 7,076 (d, <i>J</i> =2,8 Hz, 1H), 6,148 (s, 1H), 5,625 (d, <i>J</i> =4,8 Hz, 1H), 3,760 (m, <i>J</i> =3,2-2,8 Hz, 4H), 3,165 (t, <i>J</i> =3,2-2,4,2H), 2,619 (t, <i>J</i> =2,0-0,8 Hz, 2H), 2,447 (m, <i>J</i> =2,0-1,2 Hz, 4H), 2,317 (s, 3H), MS(<i>m/e</i>): 353,2 (M+1)
25	N-cyklopropyl-2-(3-(4-(2-metyl-1H-indol-5-ylamino)pyrimidin-2-ylamino)fenyl)acetamid 	(DMSO-d ₆): 7,920 (d, <i>J</i> =5,6 Hz, 1H), 7,700 (m, 2H), 7,546 (s, 1H), 7,220 (d, <i>J</i> =8,0 Hz, 1H), 7,120 (m, 2H), 6,778 (d, <i>J</i> =8,0 Hz, 1H), 6,200 (d, <i>J</i> =6,0 Hz, 1H), 6,066 (s, 1H), 3,027 (s, 2H), 2,593 (m, 1H), 2,380 (s, 3H), 0,608 (m, 2H), 0,404 (m, 2H), MS (<i>m/e</i>): 413,5 (M+1).
26	N2-(3-(2-(dimetylamino)etylsulfonyl)fenyl)-N4-(2-metyl-1H-indol-5-yl)pyrimidin-2,4-diamin 	(CD ₃ OD): 8,237 (s, 1H), 8,042 (d, <i>J</i> =6,8 Hz, 1H), 7,867 (d, <i>J</i> =6,0 Hz, 1H), 7,477 (s, 1H), 7,465 (br, 2H), 7,253 (d, <i>J</i> =8,8 Hz, 1H), 7,028 (d, <i>J</i> =8,0 Hz, 1H), 6,141 (d, <i>J</i> =5,6 Hz, 1H), 6,088 (s, 1H), 3,230 (t, <i>J</i> =7,6 Hz, 2H), 2,666 (t, <i>J</i> =7,2 Hz, 2H), 2,409 (s, 3H), 2,165 (s, 6H); MS: 451,4 (M+1).

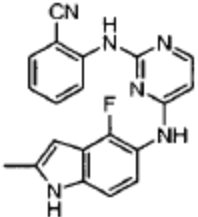
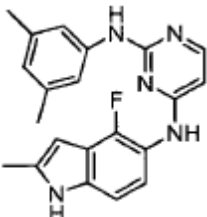
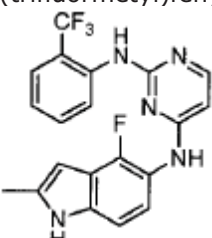
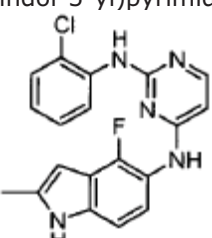
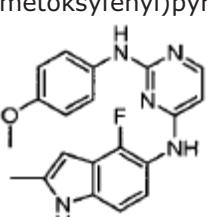
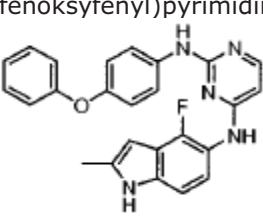
27	N4-(2-metyl-1H-indol-5-yl)-N2-(3-(1-(metylsulfonyl)piperidin-4-yloksy)fenyl)-pyrimidin-2,4-diamin 	(DMSO-d ₆): 10,976 (s, 1 H), 9,240 (s, 1 H), 9,036 (s, 1 H), 7,054-8,014 (m, 7H), 6,401-6,564 (m, 1H), 6,114-6,278 (m, 1H), 6,012-6,073 (m, 1H), 4,224-4,383 (m, 1H), 3,110-3,209 (m, 2H), 2,770-2,886 (m, 2H), 2,370 (s, 3H), 1,806-1,970 (m, 2H), 1,578-1,712 (m, 1H); MS (<i>m/e</i>): 493,5 (M+1)
28	N-(3-(4-(2-metyl-1H-indol-5-ylamino)-pyrimidin-2-ylamino)fenyl)metansulfonamid 	(CD ₃ OD): 7,856 (d, <i>J</i> =6,0 Hz, 1H), 7,652 (s, 1H), 7,543 (s, 1H), 7,432 (dd, <i>J</i> =8,4 Hz, 1H), 7,271 (d, <i>J</i> =8,4 Hz, 1H), 7,196 (t, <i>J</i> =8,0 Hz, 1H), 6,882 (dd, <i>J</i> =8,0 Hz, 2H), 6,130 (d, <i>J</i> =6,0 Hz, 2H), 2,440 (s, 3H), 2,172 (s, 3H); MS (<i>m/e</i>): 409,3 (M+1)
29	N4-(2-metyl-1H-indol-5-yl)-N2-(3-(2-morfolinoetoksy)fenyl)pyrimidin-2,4-diamin 	(DMSO-d ₆): δ10,825 (s, 1H), 9,023 (s, 1H), 8,986 (s, 1H), 7,927 (d, <i>J</i> =5,6 Hz, 1H), 7,703 (s, 1H), 7,429 (s, 1H), 7,351 (d, <i>J</i> =2,4 Hz, 1H), 7,208 (d, <i>J</i> =8,8 Hz, 1H), 7,076 (m, <i>J</i> =8 Hz, 2H), 6,469 (dd, <i>J</i> =8, 2,4 Hz, 1H), 6,118 (d, <i>J</i> =2 Hz, 1H), 6,057 (s, 1H), 3,933 (t, <i>J</i> =5,6 Hz, 2H), 3,551 (t, <i>J</i> =4,8 Hz, 4H), 2,591 (t, <i>J</i> =5,6 Hz, 2H), 2,401 (t, <i>J</i> =4,8 Hz, 4H), 2,379 (s, 3H); MS (<i>m/e</i>): 444,5 (M+1).
30	N2-(3-(3-(dimetylamino)propoksy)fenyl)-N4-(2-metyl-H-indol-5-yl)pyrimidin-2,4-diamin 	(CD ₃ OD): 10,836 (s, 1H), 9,021 (s, 1H), 8,983 (s, 1H), 7,926 (d, <i>J</i> =6 Hz, 1H), 7,691 (s, 1H), 7,419 (s, 1H), 7,345 (d, <i>J</i> =8,4 Hz, 1H), 7,212 (d, <i>J</i> =8,4 Hz, 1H), 7,079 (m, 2H), 6,444 (dd, <i>J</i> =8, 2,4 Hz, 1H), 6,118 (d, <i>J</i> =6 Hz, 1H), 6,062 (s, 1H), 3,835 (t, <i>J</i> =6 Hz, 2H), 2,317 (s, 3H), 2,318 (t, <i>J</i> =7,2 Hz, 2H), 2,154 (s, 6H), 1,767 (t, <i>J</i> =7,2 Hz, 2H); MS(<i>m/e</i>): 416,5 (M+1).
31	2-(3-(4-(2-metyl-1H-indol-5-ylamino)-pyrimidin-2-ylamino)fenoksy)etanol 	(CD ₃ OD): 10,902 (s, 1H), 9,087 (s, 1H), 8,986 (s, 1H), 7,917 (d, <i>J</i> =4 Hz, 1H), 7,683 (s, 1H), 7,405 (m, 2H), 7,227 (m, 1H), 7,104 (m, 1H), 6,458 (d, <i>J</i> =8 Hz, 1H), 6,141 (s, 1H), 6,050 (m, 2H), 5,594 (m, 1H), 3,873 (t, <i>J</i> =5,6 Hz, 2H), 3,653 (t, <i>J</i> =6 Hz, 2H), 2,376 (s, 3H); MS(<i>m/e</i>): 375,4 (M+1)

32	2-(2-(4-(2-metyl-1H-indol-5-ylamino)-pyrimidin-2-ylamino)fenoksy)etanol 	(CD ₃ OD): 10,851 (s, 1H), 9,117 (s, 1H), 8,431 (d, <i>J</i> =8,0 Hz, 1H), 7,938 (d, <i>J</i> =6,0 Hz, 1H), 7,869 (s, 1H), 7,689 (br, 1H), 7,228 (d, <i>J</i> =8,8 Hz, 1H), 6,983-7,053 (m, 2H), 6,836-6,923 (m, 2H), 6,147 (d, <i>J</i> =6,0 Hz, 1H), 6,079 (s, 1H), 5,137 (t, <i>J</i> =5,6 Hz, 1H), 4,061 (q, <i>J</i> =11,2 Hz, 1,2 Hz, 2H), 3,767 (q, <i>J</i> =9,6 Hz, 5,6 Hz, 2H), 2,389 (s, 3H); MS(<i>m/e</i>): 376,3 (M+1).
33	N4-(2-metyl-1H-indol-5-yl)-N2-(2-(2-morfolinoetoksy)fenyl)pyrimidin-2,4-diamin 	(CD ₃ OD): 10,845 (s, 1H), 9,112 (s, 1H), 8,377 (d, <i>J</i> =7,6 Hz, 1H), 7,935 (d, <i>J</i> =6,0 Hz, 1H), 7,823 (s, 1H), 7,647 (br, 1H), 7,219 (d, <i>J</i> =8,8 Hz, 1H), 7,061 (d, <i>J</i> =8 Hz, 2H), 6,889-6,950 (m, 2H), 6,147 (d, <i>J</i> =6,0 Hz, 1H), 6,074 (s, 1H), 4,182 (t, <i>J</i> =6,0 Hz, 2H), 3,592 (t, <i>J</i> =4,8 Hz, 4H), 2,692 (t, <i>J</i> =5,2 Hz, 2H), 2,471 (br, 4H), 2,388 (s, 3H); MS(<i>m/e</i>): 445,3 (M+1).
34	N-metyl-3-(4-(2-metyl-1H-indol-5-ylamino)-pyrimidin-2-ylamino)benzamid 	(DMSO- <i>d</i> ₆): δ 11,015 (s, 1H), 10,776 (s, 1H), 10,593 (s, 1H), 8,493 (d, <i>J</i> =4 Hz, 1H), 7,938 (m, 2H), 7,803 (d, <i>J</i> =2 Hz, 1H), 7,651 (m, 2H), 7,374 (m, 1H), 7,210 (m, 2H), 6,467 (m, 1H), 6,046 (s, 1H), 2,779 (d, 4,4 Hz, 3H), 2,379 (s, 3H); MS (<i>m/e</i>): 373,4 (M+1).
35	3-(4-(2-metyl-1H-indol-5-ylamino)pyrimidin-2-ylamino)-N-(2-(piperidin-1-yl)etyl)-benzamid 	(CD ₃ OD): 10,832 (s, 1H), 9,156 (s, 1H), 9,056 (s, 1H), 8,157 (s, 1H), 8,054 (s, 1H), 7,946 (m, 2H), 7,700 (b, 1H), 7,319 (m, 2H), 7,199 (m, 2H), 6,159 (s, 1H), 6,052 (s, 1H), 3,180 (t, <i>J</i> =5,6 Hz, 2H), 2,378 (s, 3H), 1,480 (s, 6H), 1,372 (s, 4H), 1,229 (s, 2H), MS(<i>m/e</i>): 469,6 (M+1)
36	N-(2-(dimetylamino)etyl)-3-(4-(2-metyl-1H-indol-5-ylamino)pyrimidin-2-ylamino)-benzamid 	(CD ₃ OD): 10,846 (s, 1H), 9,149 (s, 1H), 9,077 (s, 1H), 8,181 (t, <i>J</i> =5,6 Hz, 1H), 8,036 (m, 2H), 7,934 (m, 1H), 7,706 (b, 1H), 7,340 (m, 1H), 7,270 (m, 1H), 7,203 (m, 1H), 7,137 (m, 1H), 6,160 (d, <i>J</i> =5,6 Hz, 1H), 6,054 (s, 1H), 3,313 (t, <i>J</i> =6,4 Hz, 2H), 3,175 (t, <i>J</i> =5,6 Hz, 2H), 2,376 (s, 3H), 2,175 (s, 6H), MS(<i>m/e</i>): 429,5 (M+1)

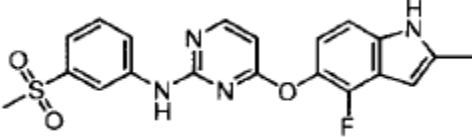
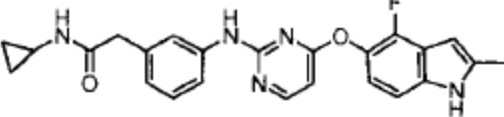
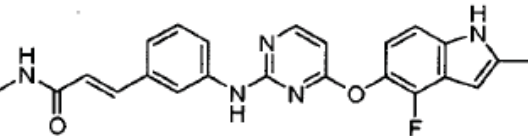
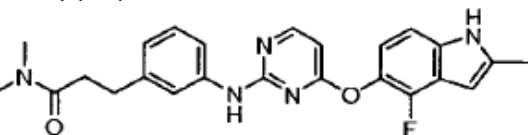
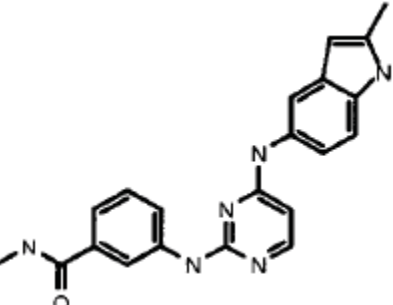
37	N2-(3-(4-metoksyfenyl)-1H-pyrazol-5-yl)-N4-(2-metyl-1H-indol-5-yl)pyrimidin-2,4-diamin 	(DMSO-d ₆): δ 12,354 (s, 1H), 10,911 (s, 1H), 8,985 (br, 2H), 7,901 (s, 1H), 7,599 (br, 2H), 7,259 (d, $J=8,4$ Hz, 1H), 7,037 (s, 1H), 6,941-6,913 (m, 2H), 6,099 (br, 2H), 3,787 (s, 3H), 2,493 (s, 3H); MS (m/e): 412,8 (M+1).
38	N-(3-etylnylfenyl)-4-(2-metyl-1H-indol-5-yloksy)pyrimidin-2-amin 	(CD ₃ OD): 8,190 (d, $J=6,0$ Hz, 1H), 8,098 (s, 1H), 7,612 (s, 1H), 7,489 (d, $J=8,0$ Hz, 1H), 7,339-7,284 (m, 2H), 7,053 (t, $J=8,4$ Hz, 1H), 6,937 (dd, $J=8,4$ Hz, 2,0 Hz, 2H), 6,294 (d, $J=6,0$ Hz, 2H), 6,262 (s, 1H), 2,495 (s, 3H); MS(m/e): 341,1 (M+1)
39	N-(4-metoksyfenyl)-4-(2-metyl-1H-indol-5-yloksy)pyrimidin-2-amin 	(CD ₃ OD): 8,198 (d, $J=6,4$ Hz, 1H), 7,974 (s, 1H), 7,363-7,283 (m, 2H), 6,935 (m, 2H), 6,742 (t, $J=8,4$ Hz, 1H), 6,260 (s, 1H), 6,200 (d, $J=5,6$ Hz, 1H), 3,771 (s, 3H), 2,493 (s, 3H), MS(m/e): 347,2 (M+1).
41	4-(2-metyl-1H-indol-5-yloksy)-N-(4-fenoksyfenyl)pyrimidin-2-amin 	(CD ₃ OD): 8,201 (d, $J=5,6$ Hz, 1H), 7,373 (m, $J=8,8-5,2$ Hz, 4H), 7,188 (d, $J=2,0$ Hz, 1H), 7,081 (t, $J=7,2-6,8$ Hz, 1H), 6,989 (d, $J=3,2$ Hz, 2H), 6,890 (d, $J=8,4$ Hz, $J=2,0$ Hz, 1H), 6,644 (d, $J=9,2$ Hz, 2H), 6,323 (d, $J=6,4$ Hz, 1H), 6,137 (s, 1H), 2,376 (s, 3H), MS(m/e): 409,3 (M+1).
42	N-(3-metoksyfenyl)-4-(2-metyl-1H-indol-5-yloksy)pyrimidin-2-amin 	(CD ₃ OD): 8,236 (d, $J=5,2$ Hz, 1H), 7,983 (s, 1H), 7,314-7,283 (m, 2H), 7,239 (br, 1H), 7,063 (t, $J=8,0$ Hz, 1H), 6,981 (d, $J=8,0$ Hz, 1H), 6,981 (dd, $J=8,8$ Hz, 2,0 Hz, 1H), 6,528 (d, $J=8,0$ Hz, 1H), 6,278-6,253 (m, 1H), 3,571 (s, 1H), 2,493 (s, 3H), MS(m/e): 347,2 (M+1).

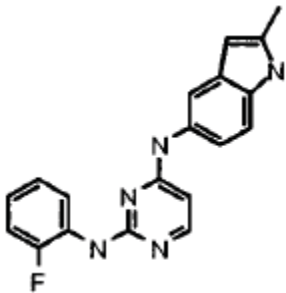
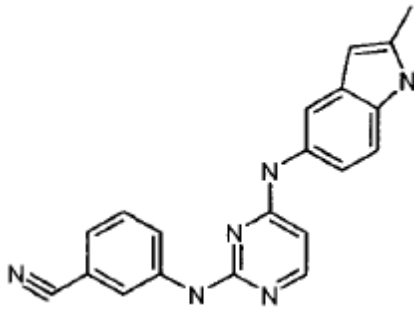
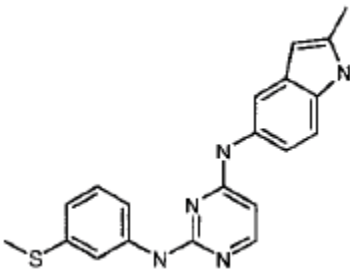
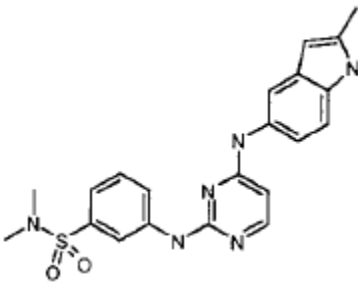
43	4-(2-metyl-1H-indol-5-yloksy)-N-(3-(3-(tiomorfolino-1',1'-dioksid)propoksy)fenyl)-pyrimidin-2-amin		(CD ₃ OD): 8,298 (s, 1H), 7,996 (d, J=5,6 Hz, 1H), 7,385 (d, J=8,4 Hz, 1H), 7,197 (t, J=8,0 Hz, 1H), 7,094 (d, J=8,4 Hz, 2H), 6,791 (s, 1H), 6,543 (d, J=8,0 Hz, 1H), 6,333 (s, 1H), 5,995 (d, J=6,0 Hz, 1H), 5,321 (s, 1H), 3,974 (t, J=5,6 Hz, 1H), 3,077 (m, 8H), 2,699 (t, J=6,8 Hz, 1H), 2,468 (s, 3H), 1,926 (t, J=6,8 Hz, 2H);
44	N-metyl-3-(4-(2-metyl-1H-indol-5-yloksy)-pyrimidin-2-ylamino)benzamid		(DMSO-d ₆): 11,130 (s, 1H), 9,631 (s, 1H), 8,324 (d, J=4,2 Hz, 1H), 8,309 (s, 1H), 7,994 (s, 1H), 7,741 (s, 1H), 7,308 (d, J=9,2 Hz, 1H), 7,219 (d, J=1,6 Hz, 1H), 7,052 (t, J=2,0-0,8 Hz, 2H), 6,932 (m, 1H), 6,272 (d, J=3,6 Hz, 1H), 6,140 (d, J=4,2 Hz, 1H), 5,249 (s, 1H), 2,801 (s, 3H), 2,437 (s, 3H), 2,401 (m, 2H); MS (m/e): 374,3 (M+1)
45	trifluor-N-(4-(4-(2-metyl-1H-indol-5-yloksy)-pyrimidin-2-ylamino)fenyl)metansulfonamid		(DMSO-d ₆): 11,248 (s, 1H), 9,304 (s, 1H), 9,153 (s, 1H), 7,960 (s, 1H), 7,913 (d, J=6,0 Hz, 1H), 7,543 (d, J=4,4 Hz, 2H), 7,132 (d, J=8,4 Hz, 1H), 7,063 (m, 1H), 6,910 (t, J=3,6 Hz, 2H), 6,217 (s, 1H), 6,106 (t, J=1,6-2,4 Hz, 1H), 2,411 (s, 3H) MS (m/e): 464,4 (M+1)
46	(S)-4-(2-metyl-1H-indol-5-yloksy)-N-(3-(pyrrolidin-3-yloksy)fenyl)pyrimidin-2-amin		(DMSO-d ₆): 11,122 (s, 1H), 9,515 (s, 1H), 8,306 (d, J=5,6 Hz, 1H), 7,156-7,332 (m, 4H), 6,951 (t, J=8,0 Hz, 1H), 6,827 (dd, J=8,4 Hz, 2,0 Hz, 1H), 6,427 (dd, J=8,4 Hz, 2,0 Hz, 1H), 6,267 (d, J=6,0 Hz, 1H), 6,139 (s, 1H), 6,639 (m, 2H), 4,652-4,711 (m, 1H), 2,964-3,154 (m, 4H), 2,401 (s, 3H), 1,958-1,993 (m, 1H), 1,825-1,898 (m, 1H); MS (m/e): 402,4 (M+1)
47	N-metyl-3-(4-(2-metyl-1H-indol-5-yloksy)-pyrimidin-2-ylamino)benzensulfonamid		(CDCl ₃): 8,290 (d, 1H), 8,115 (s, 1H), 7,994 (s, 1H), 7,504 (d, J=8, 1H), 7,409 (m, 2H), 7,247 (d, J=8, 1H), 6,958 (m, J=10,8), 6,403 (d, J=5,6, 1H), 6,254 (s, 1H), 2,505 (s, 3H), 2,478 (d, J=5,6, 3H), MS (m/e): 410,1 (M+1)

48	N-(4-(4-(2-metyl-1H-indol-5-yloksy)-pyrimidin-2-ylamino)fenyl)metansulfonamid 	(CD ₃ OD): 11,204 (s, 1H), 9,120 (s, 1H), 8,837 (s, 1H), 7,959 (d, <i>J</i> =5,6 Hz, 1H), 7,791 (d, <i>J</i> =6,8 Hz, 2H), 7,144 (s, 1H), 7,026 (d, <i>J</i> =7,6 Hz, 2H), 6,922 (d, <i>J</i> =7,2 Hz, 1H), 6,210 (s, 1H), 6,115 (s, 1H), 4,007 (s, 3H), 2,405 (s, 3H); MS(<i>m/e</i>): 358,2 (M+1).
49	2-(3-(4-(2-metyl-1H-indol-5-yloksy)-pyrimidin-2-ylamino)fenyl)-N-(2-morfolinoetyl)acetamid 	(CD ₃ OD): 11,211 (s, 1H), 8,935 (s, 1H), 8,760 (s, 1H), 7,959 (t, <i>J</i> =8,8-5,6 Hz, 2H), 7,376 (s, 1H), 7,276 (d, <i>J</i> =7,6 Hz, 1H), 7,120 (t, <i>J</i> =8,8-4,4 Hz, H), 6,896 (t, <i>J</i> =8,0 Hz, 2H), 6,403 (t, <i>J</i> =2,0-1,6 Hz, 1H), 6,205 (s, 1H), 6,004 (s, 1H), 3,560 (s, 3H), 2,405 (s, 3H); MS(<i>m/e</i>): 364,2 (M+1).
50	4-(2-metyl-1H-indol-5-yloksy)-N-(3-(2-(metylsulfonyl)etoksy)fenyl)pyrimidin-2-amin 	(CD ₃ OD): 8,345 (s, 1H), 8,049 (s, 1H), 7,915 (d, <i>J</i> =6,0 Hz, 1H), 7,826 (s, 1H), 7,58 (d, <i>J</i> =8,8 Hz, 1H), 7,535 (m, <i>J</i> =7,2-6,8 Hz, 1H), 7,433 (d, <i>J</i> =7,6 Hz, 2H), 7,103 (d, <i>J</i> =7,6 Hz, 1H), 6,241 (s, 1H), 2,460 (s, 3H); MS(<i>m/e</i>): 402,2 (M+1).
51	N-metyl(3-(4-(2-metyl-1H-indol-5-yloksy)-pyrimidin-2-ylamino)fenyl)metansulfonamid 	11,217 (s, 1H), 8,998 (s, 1H), 8,789 (s, 1H), 7,947 (d, <i>J</i> =5,6 Hz, 1H), 7,595 (m, <i>J</i> =7,8-1,6 Hz, 2H), 7,133 (d, <i>J</i> =8,0 Hz, 2H), 7,000 (s, 1H), 6,721 (d, <i>J</i> =2,8 Hz, 1H), 6,211 (s, 1H), 6,021 (s, 1H), 2,403 (s, 3H), 2,346 (s, 3H); MS(<i>m/e</i>): 380,2 (M+1).
52	N4-(4-fluor-2-metyl-1H-indol-5-yl)-N2-(3-fluorfenyl)pyrimidin-2,4-diamin 	(CD ₃ OD): 11,234 (s, 1H), 9,256 (s, 1H), 8,898 (s, 1H), 7,966 (d, <i>J</i> =5,6 Hz, 1H), 7,752 (d, <i>J</i> =8,4 Hz, 1H), 7,393 (t, <i>J</i> =8,4 Hz, 1H), 7,133 (m, <i>J</i> =8,4-3,6 Hz, 3H), 6,612 (t, <i>J</i> =7,6-1,2 Hz, 1H), 6,239 (s, 1H), 6,050 (s, 1H), 2,402 (s, 3H); MS(<i>m/e</i>): 352,2 (M+1).
53	N2-(3-klorfenyl)-N4-(4-fluor-2-metyl-1H-indol-5-yl)pyrimidin-2,4-diamin 	(CD ₃ OD): 11,221 (s, 1H), 8,965 (s, 1H), 8,775 (s, 1H), 7,927 (d, <i>J</i> =6,0 Hz, 1H), 7,619 (d, <i>J</i> =8,0 Hz, 2H), 7,128 (m, <i>J</i> =8,0-7,6 Hz, 2H), 6,958 (d, <i>J</i> =7,8 Hz, 2H), 6,210 (s, 1H), 2,411 (s, 3H); MS(<i>m/e</i>): 368,2 (M+1).

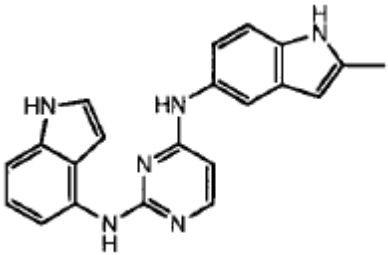
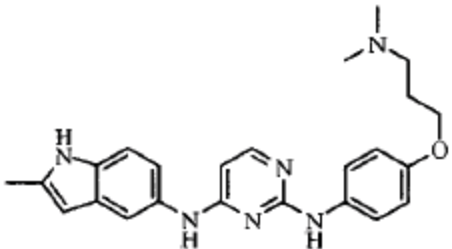
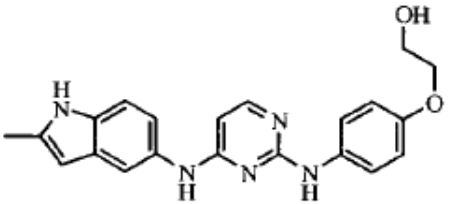
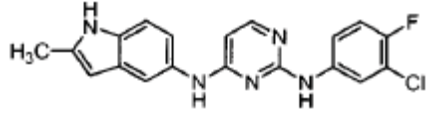
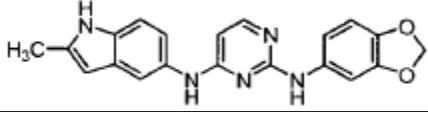
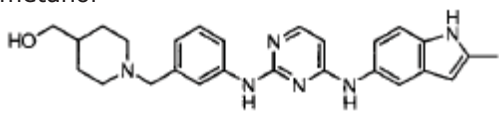
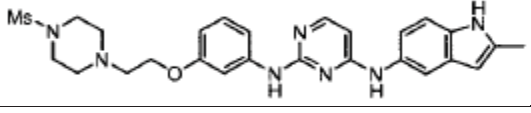
54	2-(4-(4-fluor-2-metyl-1H-indol-5-ylamino)-pyrimidin-2-ylamino)benzonitril 	(CD ₃ OD): 11,248 (s, 1H), 9,412 (s, 1H), 8,959 (s, 1H), 8,208 (s, 1H), 7,936 (d, <i>J</i> =7,2 Hz, 1H), 7,562 (d, <i>J</i> =5,6 Hz, 1H), 7,287 (s, 2H), 7,164 (d, <i>J</i> =8,4 Hz, 2H), 6,233 (s, 1H), 6,075 (s, 1H), 2,399 (s, 3H); MS (<i>m/e</i>): 359,2 (M+1).
55	N2-(3,5-dimetylfenyl)-N4-(4-fluor-2-metyl-1H-indol-5-yl)pyrimidin-2,4-diamin 	(CD ₃ OD): 11,200 (s, 1H), 8,806 (s, 1H), 8,745 (s, 1H), 7,911 (d, <i>J</i> =6,0 Hz, 1H), 7,216 (s, 2 H), 7,117 (t, <i>J</i> =8,8-7,8 Hz, 2H), 6,396 (s, 1H), 6,181 (s, 1H), 6,010 (s, 1H), 2,381 (s, 3H); 1,985 (s, 6H); MS(<i>m/ e</i>): 362,3 (M+1).
56	N4-(4-fluor-2-metyl-1H-indol-5-yl)-N2-(2-(trifluormetyl)fenyl)pyrimidin-2,4-diamin 	(CD ₃ OD): 11,211 (s, 1H), 8,898 (s, 1H), 8,209 (s, 1H), 7,939 (t, <i>J</i> =9,6-6,0 Hz, 2H), 7,270 (t, <i>J</i> =8,4-1,6 Hz, 1 H), 7,126 (s, 2H), 6,998 (m, <i>J</i> =2,0-1,2 Hm2H), 6,225 (s, 1H), 6,035 (s, 1H), 2,402 (s, 3H); MS(<i>m/e</i>): 402,2 (M+1).
57	N2-(2-klorfenyl)-N4-(4-fluor-2-metyl-1H-indol-5-yl)pyrimidin-2,4-diamin 	(CD ₃ OD): 11,231 (s, 1H), 8,922 (s, 1H), 8,143 (d, <i>J</i> =8,0 Hz, 1H), 7,936 (s, <i>J</i> =5,6 Hz, 1H), 7,790 (s, 1H), 7,424 (d, <i>J</i> =8,4 Hz, 1H), 7,101 (m, <i>J</i> =8,4-7,2 Hz, 2H), 6,993 (t, <i>J</i> =8,8-7,2 Hz, 1H), 6,216 (s, 1H), 6,093 (m, <i>J</i> =7,2-10,0 Hz, 1H), 4,043 (s, <i>J</i> =7,8 Hz, 1H), 2,402 (s, 3H); MS(<i>m/e</i>): 368,2 (M+1).
59	N4-(4-fluor-2-metyl-1H-indol-5-yl)-N2-(4-metoksyfenyl)pyrimidin-2,4-diamin 	11,222 (s, 1H), 8,796 (s, 1H), 8,729 (s, 1H), (CD ₃ OD): 7,959 (s, 1H), 7,892 (d, <i>J</i> =5,6 Hz, 1H), 7,547 (d, <i>J</i> =8,8 Hz, 2 H), 7,075 (s, 1H), 6,646 (d, <i>J</i> =7,6 Hz, 2H), 6,222 (s, 1H), 5,567 (s, 1H), 3,658 (s, 3H), 2,406 (s, 3H); MS(<i>m/e</i>): 402,2 (M+1).
60	N4-(4-fluor-2-metyl-1H-indol-5-yl)-N2-(4-fenoksyfenyl)pyrimidin-2,4-diamin 	(CD ₃ OD): 11,190 (s, 1H), 9,046 (s, 1H), 8,801 (s, 1H), 7,959 (s, 1H), 7,931 (d, <i>J</i> =6,0 Hz, 1H), 7,681 (d, <i>J</i> =7,2 Hz, 2H), 7,361 (t, <i>J</i> =8,0-7,6 Hz, 2H), 7,114 (m, <i>J</i> =8,4-7,2 Hz, 3H), 6,903 (d, <i>J</i> =8,0 Hz, 2H), 6,755 (d, <i>J</i> =7,2 Hz, 2H), 6,179 (s, 1H), 6,024 (s, 1H), 2,338 (s, 3H), MS(<i>m/e</i>): 426,2 (M+1).

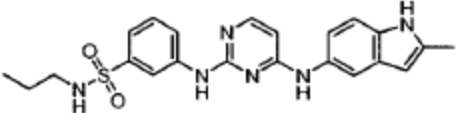
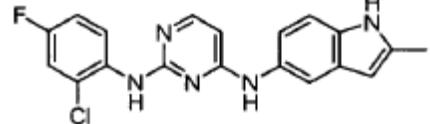
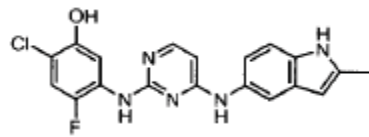
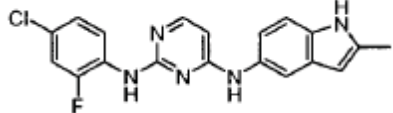
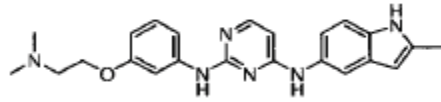
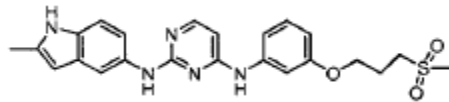
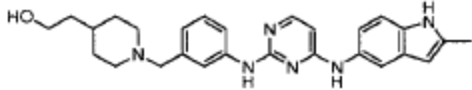
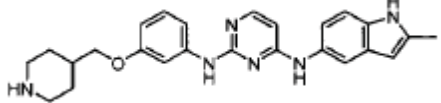
61	2-(1-(3-(4-(4-fluor-2-metyl-1H-indol-5-ylamino)pyrimidin-2-ylamino)benzyl)-piperidin-4-yl)etanol	(CD ₃ OD): 7,932 (s, 1H), 7,885 (d, <i>J</i> =5,6 Hz, 1H), 7,331 (m, 1H), 7,204 (m, 3H), 7,103 (t, <i>J</i> =7,2 Hz, 1H), 6,958 (d, <i>J</i> =7,6 Hz, 1H), 6,251 (s, 1H), 6,176 (m, 1H), 3,603-3,572 (m, 4H), 3,068-3,041 (m, 2H), 2,454 (s, 3H), (m, 2H), 2,197 (br, 2H), 1,783-1,750 (m, 2H), 1,563 (br, 2H), 1,477 (m, 2H), 1,311-1,275 (m, 2H), MS(<i>m/e</i>): 475,4 (M+1)
62	N4-(4-fluor-2-metyl-1H-indol-5-yl)-N2-(3-(3-(metylsulfonyl)propoksy)fenyl)pyrimidin-2,4-diamin	(DMSO- <i>d</i> ₆): 7,932 (d, <i>J</i> =6,0 Hz, 1H), 7,399 (s, 1H), 7,393 (d, <i>J</i> =6,8 Hz, 1H), 7,099 (m, 2H), 6,97 (m, 1H), 6,416 (d, <i>J</i> =8,0 Hz, 1H), 6,207 (s, 1H), 6,088 (s, 1H), 3,84 (m, 2H), 3,196 (m, 2H), 3,010 (s, 3H), 2,400 (s, 3H), 2,014 (m, 2H), MS (<i>m/e</i>): 470,5 (M+1).
63	2-(3-(4-(4-fluor-2-metyl-1H-indol-5-ylamino)pyrimidin-2-ylamino)fenoksy)etanol	(DMSO- <i>d</i> ₆): 7,938 (d, <i>J</i> =6,0 Hz, 1H), 7,347 (m, 2H), 7,104 (m, 2H), 6,950 (m, 1H), 6,410 (d, <i>J</i> =8,0 Hz, 1H), 6,206 (s, 1H), 6,088 (s, 1H), 3,788 (m, 2H), 3,630 (m, 2H), 2,401 (s, 3H), MS (<i>m/e</i>): 394,4 (M+1).
64	N4-(4-fluor-2-metyl-1H-indol-5-yl)-N2-(3-(piperidin-3-yloksy)fenyl)pyrimidin-2,4-diamin	(DMSO- <i>d</i> ₆): 11,241 (s, 1H), 8,966 (s, 1H), 8,789 (s, 1H), 7,929 (d, <i>J</i> =5,6 Hz, 1H), 7,378 (s, 1H), 7,267 (d, <i>J</i> =7,6 Hz, 1H), 7,120-7,053 (m, 2H), 6,964 (m, 1H), 6,380 (d, <i>J</i> =8,0 Hz, 1H), 6,207 (s, 1H), 6,010 (s, 1H), 4,010 (s, 1H), 3,710 (m, 1H); 3,554 (s, 2H), 3,362 (m, 2H), 2,506 (s, 3H), 2,401 (m, 2H), 1,234 (m, 2H), MS (<i>m/e</i>): 433,2 (M+1)
65	N4-(4-fluor-2-metyl-1H-indol-5-yl)-N2-(3-((1-(metylsulfonyl)piperidin-4-yl)-metoksy)-fenyl)pyrimidin-2,4-diamin	(CD ₃ OD): 8,021 (d, <i>J</i> =5,6 Hz, 1H), 7,418 (s, 1H), 7,220-7,051 (m, 3H), 6,998 (m, 1H), 6,612 (d, <i>J</i> =7,4 Hz, 1H), 6,267 (s, 1H), 5,800 (d, <i>J</i> =5,6 Hz, 1H), 3,960 (d, <i>J</i> =5,2 Hz, 2H), 3,810 (m, 2H); 3,362 (m, 2H), 2,826 (s, 3H), 2,506 (s, 3H), 1,556 (m, 2H), 1,452 (m, 1H), 1,234 (m, 2H)
66	1-(3-(4-(4-fluor-2-metyl-1H-indol-5-yloksy)-pyrimidin-2-ylamino)benzyl)piperidin-4-ol	(CD ₃ OD): 8,247 (d, <i>J</i> =5,6 Hz, 1H), 7,378 (s, 1H), 7,160-7,108 (m, 2H), 6,956 (t, <i>J</i> =8,0 Hz, 1H), 6,895-6,825 (m, 2H), 6,450 (d, <i>J</i> =5,6 Hz, 1H), 6,247 (s, 1H), 3,031 (s, 1H), 2,690-2,663 (m, 2H), 2,455 (s, 3H), 2,069-2,042 (m, 2H), 1,815-1,716 (m, 2H), 1,562-1,483 (m, 2H); MS (<i>m/e</i>): 448,5 (M+1)

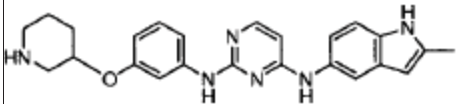
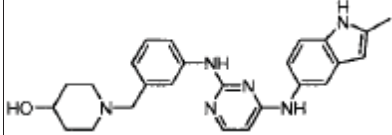
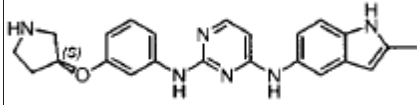
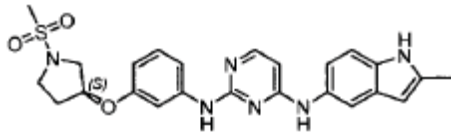
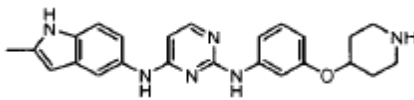
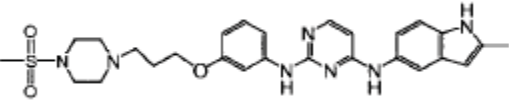
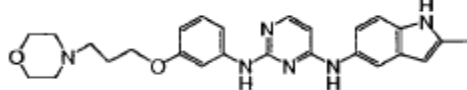
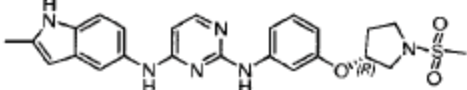
67	4-(4-fluor-2-metyl-1H-indol-5-yloksy)-N-(3-(metylsulfonyl)fenyl)pyrimidin-2-amin 	(CD ₃ OD): 8,292 (d, <i>J</i> =5,6 Hz, 1H), 8,005 (s, 1H), 7,691 (d, <i>J</i> =7,2 Hz, 1H), 7,341 (d, <i>J</i> =7,2 Hz, 1H), 7,102 (d, <i>J</i> =8,8 Hz, 1H), 7,013 (t, <i>J</i> =7,2 Hz, 1H), 6,849 (t, <i>J</i> =8,0 Hz, 1H), 6,482 (d, <i>J</i> =5,6 Hz, 1H), 6,221 (s, 1H), 2,900 (s, 3H), 2,432 (s, 3H); MS (<i>m/e</i>): 413,4 (M+1)
68	N-cyklopropyl-2-(3-(4-(4-fluor-2-metyl-1H-indol-5-yloksy)pyrimidin-2-ylamino)fenyl)-acetamid 	(DMSO-d ₆): 7,947 (m, 2H), 7,298 (m, 2H), 7,154 (d, <i>J</i> =8,4 Hz, 1H), 6,947 (m, 1H), 6,755 (m, 1H), 6,775 (d, <i>J</i> =8,0 Hz, 1H), 6,441 (d, <i>J</i> =5,6 Hz, 1H), 6,240 (s, 1H), 3,027 (s, 2H), 2,593 (m, 1H), 2,499 (s, 3H), 0,596 (m, 2H), 0,390 (m, 2H), MS (<i>m/e</i>): 432,5 (M+1)
69	(E)-3-(3-(4-(4-fluor-2-metyl-1H-indol-5-yloksy)pyrimidin-2-ylamino)fenyl)-N-metylakrylamid 	(DMSO-d ₆): 11,550 (s, 1H), 9,791 (s, 1H), 8,385 (d, <i>J</i> =5,2, 1H), 8,114 (d, <i>J</i> =4,8, 1H), 7,432 (d, <i>J</i> =7,2, 2H), 7,214 (d, <i>J</i> =10, 1H), 7,184 (d, <i>J</i> =3,2, 1H), 7,083 (d, <i>J</i> =8, 2H), 6,942 (m, <i>J</i> =16, 1H), 6,533 (d, <i>J</i> =5,6, 1H), 6,402 (d, <i>J</i> =15,6, 1H), 6,253 (s, 1H), 2,687 (d, <i>J</i> =4,8, 3H), 2,440 (s, 3H). MS (<i>m/e</i>): 418,2 (M+1)
70	3-(3-(4-(4-fluor-2-metyl-1H-indol-5-yloksy)-pyrimidin-2-ylamino)fenyl)-N,N-dimetylpropanamid 	(DMSO-d ₆): 11,397 (s, 1H), 9,420 (s, 1H), 8,334 (d, <i>J</i> =5,6, 1H), 7,290 (s, 1H), 7,241 (d, <i>J</i> =7,2, 1H), 7,152 (d, <i>J</i> =8,8, 1H), 6,919 (m, <i>J</i> =15,2, 1H), 6,803 (m, <i>J</i> =15,6, 1H), 6,652 (d, <i>J</i> =6,8, 1H), 6,451 (d, <i>J</i> =5,6, 1H), 6,218 (s, 1H), 2,860 (s, 3H), 2,795 (s, 3H), 2,449 (m, <i>J</i> =14,8, 2H), 2,399 (s, 3H), 2,338 (m, <i>J</i> =14,8, 2H). MS (<i>m/e</i>): 434,2 (M+1)
71	N-metyl-3-(4-(2-metyl-1H-indol-5-ylamino)-pyrimidin-2-ylamino)benzamid 	MS (<i>m/e</i>): 372,4 (M)

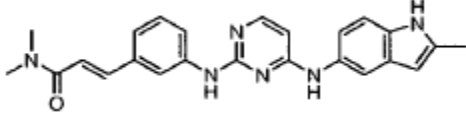
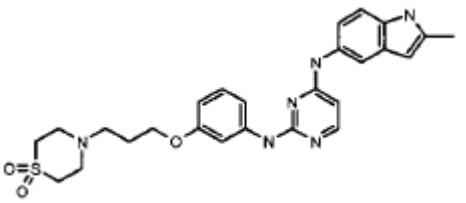
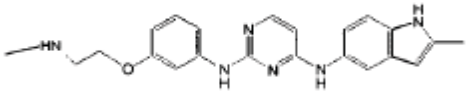
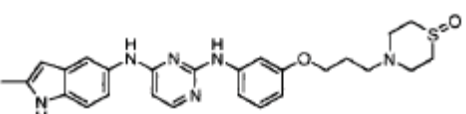
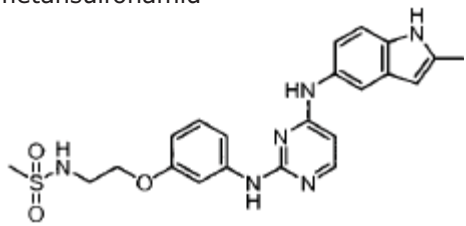
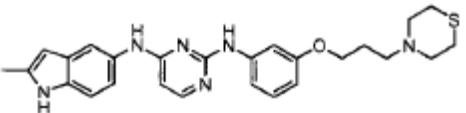
72	N2-(2-fluorfenyl)-N4-(2-metyl-1H-indol-5-yl)pyrimidin-2,4-diamin	MS (<i>m/e</i>): 350,1 (M+1)
		
73	3-(4-(2-metyl-1H-indol-5-ylamino)pyrimidin-2-ylamino)benzonitril	MS (<i>m/e</i>): 341,2 (M+1)
		
74	N4-(2-metyl-1H-indol-5-yl)-N2-(3-(metyltio)fenyl)pyrimidin-2,4-diamin	MS (<i>m/e</i>): 362,3 (M+1)
		
75	N,N-dimetyl-3-(4-(2-metyl-1H-indol-5-ylamino)pyrimidin-2-ylamino)-benzensulfonamid	MS (<i>m/e</i>): 423,5 (M+1)
		

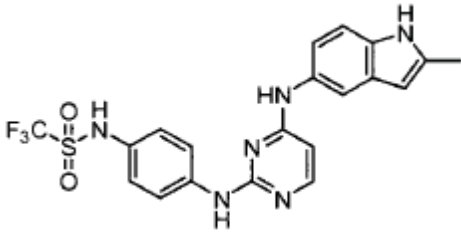
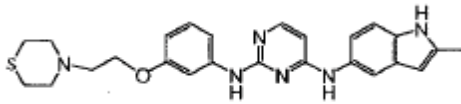
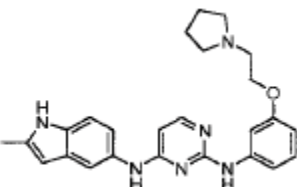
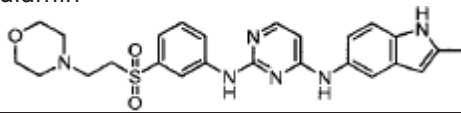
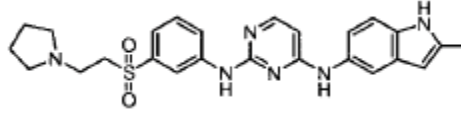
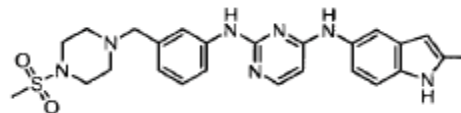
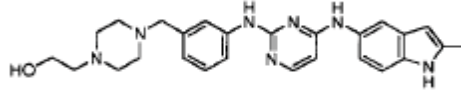
76	N4-(2-metyl-1H-indol-5-yl)-N2-(3-(morfolinosulfonyl)fenyl)pyrimidin-2,4-diamin	MS (<i>m/e</i>): 465,4 (M+1)
77	N2-(3,4-dimetoksyfenyl)-N4-(2-metyl-1H-indol-5-yl)pyrimidin-2,4-diamin	MS (<i>m/e</i>): 376,3 (M+1)
78	N2-(4-klorfenyl)-N4-(2-metyl-1H-indol-5-yl)pyrimidin-2,4-diamin	MS (<i>m/e</i>): 350,3 (M+1)
79	N2-(2,4-difluozofenyl)-N4-(2-metyl-1H-indol-5-yl)pyrimidin-2,4-diamin	MS (<i>m/e</i>): 352,2 (M+1)
80	N2-(3-klor-2-fluorfenyl)-N4-(2-metyl-1H-indol-5-yl)pyrimidin-2,4-diamin	MS (<i>m/e</i>): 368,3 (M+1)

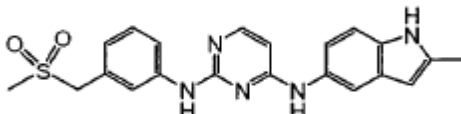
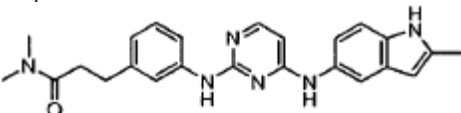
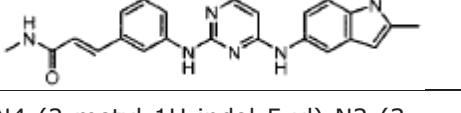
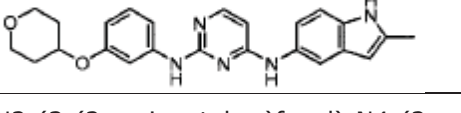
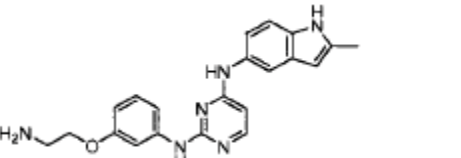
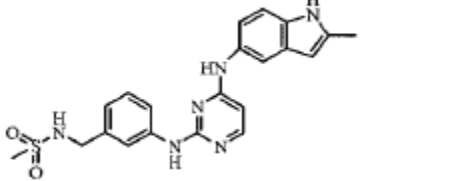
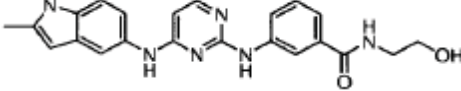
81	N2-(1H-indol-4-yl)-N4-(2-metyl-1H-indol-5-yl)pyrimidin-2,4-diamin 	MS (<i>m/e</i>): 355,3 (M+1)
82	N2-(4-(3-(dimetylamino)propoksy)fenyl)-N4-(2-metyl-1H-indol-5-yl)pyrimidin-2,4-diamin 	MS (<i>m/e</i>): 417,4 (M+1)
83	2-(4-(4-(2-metyl-1H-indol-5-ylamino)-pyrimidin-2-ylamino)fenoksy)etanol 	MS (<i>m/e</i>): 376,3 (M+1)
84	N2-(3-klor-4-fluorfenyl)-N4-(2-metyl-1H-indol-5-yl)pyrimidin-2,4-diamin 	MS (<i>m/e</i>): 368,3 (M+1)
85	N2-(benzo[d][1,3]dioksol-5-yl)-N4-(2-metyl-1H-indol-5-yl)pyrimidin-2,4-diamin 	MS (<i>m/e</i>): 360,3 (M+1)
86	(1-(3-(4-(2-metyl-1H-indol-5-ylamino)-pyrimidin-2-ylamino)benzyl)piperidin-4-yl)-metanol 	MS (<i>m/e</i>): 443,4 (M+1)
87	N4-(2-metyl-1H-indol-5-yl)-N2-(3-(2-(4-(metylsulfonyl)piperazin-1-yl)-etoksy)fenyl)-pyrimidin-2,4-diamin 	MS (<i>m/e</i>): 521,2 (M)

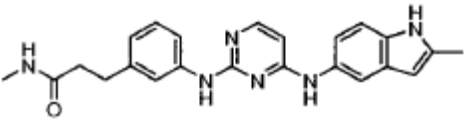
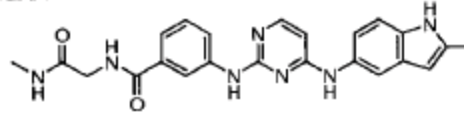
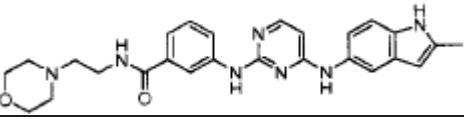
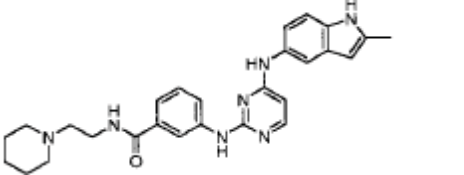
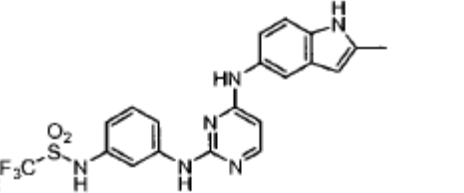
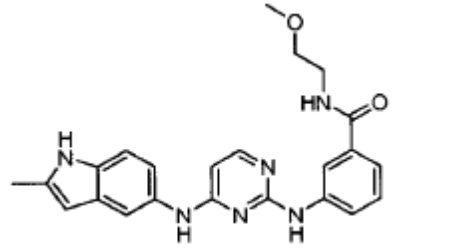
88	3-(4-(2-metyl-1H-indol-5-ylamino)pyrimidin-2-ylamino)-N-propylbenzensulfonamid 	MS (<i>m/e</i>): 437,3 (M+1)
89	N2-(2-klor-4-fluorfenyl)-N4-(2-metyl-1H-indol-5-yl)pyrimidin-2,4-diamin 	MS (<i>m/e</i>): 368,1 (M+1)
90	2-klor-4-fluor-5-(4-(2-metyl-1H-indol-5-ylamino)pyrimidin-2-ylamino)fenol 	MS (<i>m/e</i>): 384,3 (M+1)
91	N2-(4-klor-2-fluorfenyl)-N4-(2-metyl-1H-indol-5-yl)pyrimidin-2,4-diamin 	MS (<i>m/e</i>): 368,3 (M+1)
92	N2-(3-(2-(dimetylamino)etoksy)fenyl)-N4-(2-metyl-1H-indol-5-yl)pyrimidin-2,4-diamin 	MS (<i>m/e</i>): 403,4 (M+1)
93	N2-(2-metyl-1H-indol-5-yl)-N4-(3-(3-(metylsulfonyl)propoksy)fenyl)pyrimidin-2,4-diamin 	MS (<i>m/e</i>): 452,3 (M+1)
94	2-(1-(3-(4-(2-metyl-1H-indol-5-ylamino)pyrimidin-2-ylamino)benzyl)piperidin-4-yl)-etanol 	MS (<i>m/e</i>): 457,4 (M+1)
95	N4-(2-metyl-1H-indol-5-yl)-N2-(3-(piperidin-4-ylmetoksy)fenyl)pyrimidin-2,4-diamin 	MS (<i>m/e</i>): 429,4 (M+1)

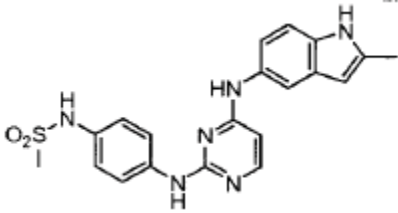
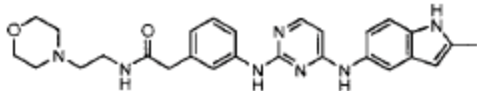
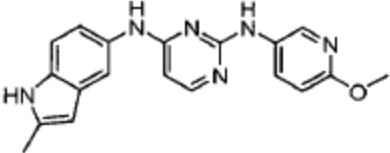
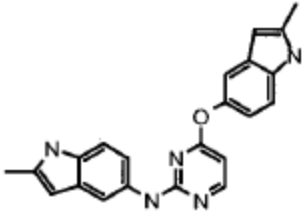
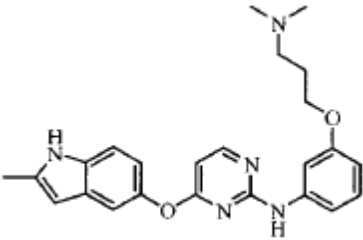
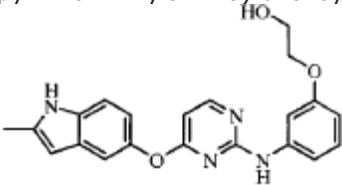
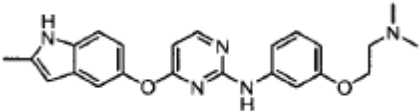
96	N4-(2-metyl-1H-indol-5-yl)-N2-(3-(piperidin-3-yloksy)fenyl)pyrimidin-2,4-diamin	MS (<i>m/e</i>): 416,4 (M+1)
		
97	1-(3-(4-(2-metyl-1H-indol-5-ylamino)-pyrimidin-2-ylamino)benzyl)piperidin-4-ol	MS (<i>m/e</i>): 429,4 (M+1)
		
98	(S)-N4-(2-metyl-1H-indol-5-yl)-N2-(3-(pyrrolidin-3-yloksy)fenyl)pyrimidin-2,4-diamin	MS (<i>m/e</i>): 401,4 (M+1)
		
99	(S)-N4-(2-metyl-1H-indol-5-yl)-N2-(3-(1-(metylsulfonyl)pyrrolidin-3-yloksy)fenyl)-pyrimidin-2,4-diamin	MS (<i>m/e</i>): 479,5 (M+1)
		
100	N4-(2-metyl-1H-indol-5-yl)-N2-(3-(piperidin-4-yloksy)fenyl)pyrimidin-2,4-diamin	MS (<i>m/e</i>): 415,5 (M+1)
		
101	N4-(2-metyl-1H-indol-5-yl)-N2-(3-(3-(4-(metylsulfonyl)piperazin-1-yl)-propoksy)-fenyl)pyrimidin-2,4-diamin	MS (<i>m/e</i>): 536,6 (M+1)
		
102	N4-(2-metyl-1H-indol-5-yl)-N2-(3-(3-morfolinopropoksy)fenyl)pyrimidin-2,4-diamin	MS (<i>m/e</i>): 459,6 (M+1)
		
103	(R)-N4-(2-metyl-1H-indol-5-yl)-N2-(3-(1-(metylsulfonyl)pyrrolidin-3-yloksy)fenyl)-pyrimidin-2,4-diamin	MS (<i>m/e</i>): 479,5 (M+1)
		

104	(E)-N,N-dimetyl-3-(3-(4-(2-metyl-1H-indol-5-ylamino)pyrimidin-2-ylamino)fenyl)-akrylamid	MS (<i>m/e</i>): 413,2 (M+1)
		
105	4-(4-fluor-2-metyl-1H-indol-5-yl)-N-(3-(3-(tiomorfolino-1',1'-dioksid)propoksy)fenyl)-pyrimidin-2-amin	MS (<i>m/e</i>): 507,5 (M+1)
		
106	N4-(2-metyl-1H-indol-5-yl)-N2-(3-(2-(metylamino)etoksy)fenyl)pyrimidin-2,4-diamin	MS (<i>m/e</i>): 389,5 (M+1)
		
107	4-(4-fluor-2-metyl-1H-indol-5-yloksy)-N-(3-(3-(tiomorfolino-1'-oksid)propoksy)fenyl)-pyrimidin-2-amin	MS (<i>m/e</i>): 491,5 (M+1)
		
108	N-(2-(3-(4-(2-metyl-1H-indol-5-ylamino)-pyrimidin-2-ylamino)fenoksy)etyl)-metansulfonamid	MS (<i>m/e</i>): 453,4 (M+1)
		
109	N4-(2-metyl-1H-indol-5-yl)-N2-(3-(3-tiomorfolinopropoksy)fenyl)pyrimidin-2,4-diamin	MS (<i>m/e</i>): 475,5 (M+1)
		

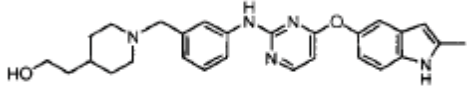
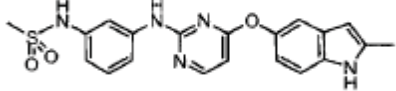
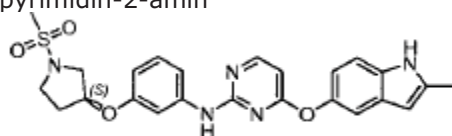
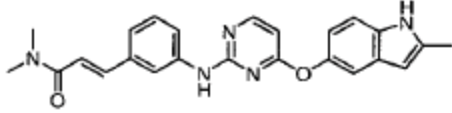
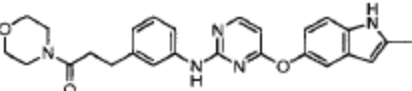
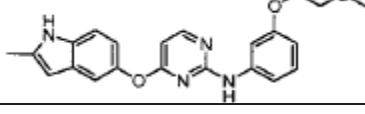
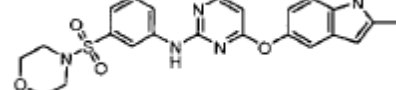
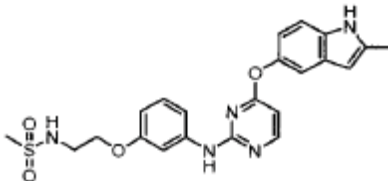
110	trifluor-N-(4-(4-(2-metyl-1H-indol-5-ylamino)pyrimidin-2-ylamino)fenyl)-metansulfonamid 	MS (<i>m/e</i>): 463,4 (M+1)
111	N4-(2-metyl-1H-indol-5-yl)-N2-(3-(2-tiomorfolinoetoksy)fenyl)pyrimidin-2,4-diamin 	MS (<i>m/e</i>): 461,4 (M+1)
112	N4-(2-metyl-1H-indol-5-yl)-N2-(3-(2-pyrrolidinetoksy)fenyl)pyrimidin-2,4-diamin 	MS (<i>m/e</i>): 429,4 (M+1)
113	N4-(2-metyl-1H-indol-5-yl)-N2-(3-(2-morfolinoetilsulfonyl)fenyl)pyrimidin-2,4-diamin 	MS (<i>m/e</i>): 493,1 (M+1)
114	N4-(2-metyl-1H-indol-5-yl)-N2-(3-(2-(pyrrolidin-1-yl)etilsulfonyl)fenyl)pyrimidin-2,4-diamin 	MS (<i>m/e</i>): 477,1 (M+1)
115	N4-(2-metyl-1H-indol-5-yl)-N2-(3-((4-(metylsulfonyl)piperazin-1-yl)-metyl)fenyl)-pyrimidin-2,4-diamin 	MS (<i>m/e</i>): 492,4 (M+1)
116	2-(4-(3-(4-(2-metyl-1H-indol-5-ylamino)-pyrimidin-2-ylamino)benzyl)piperazin-1-yl)-etanol 	MS (<i>m/e</i>): 458,5 (M+1)

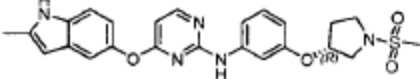
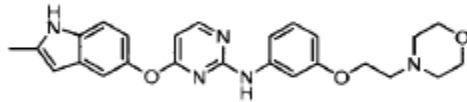
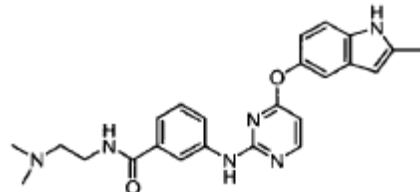
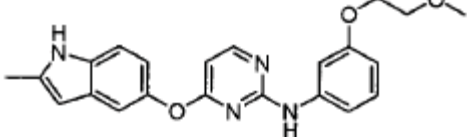
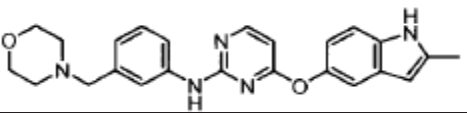
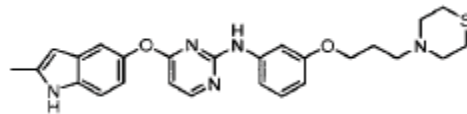
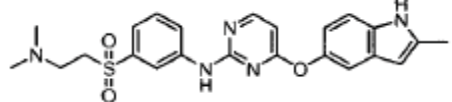
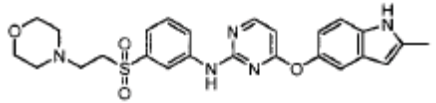
117	N4-(2-metyl-1H-indol-5-yl)-N2-(3-(metylsulfonylmetyl)fenyl)pyrimidin-2,4-diamin 	MS (<i>m/e</i>): 408,3 (M+1)
118	N,N-dimetyl-3-(3-(4-(2-metyl-1H-indol-5-ylamino)pyrimidin-2-ylamino)fenyl)-propanamid 	MS (<i>m/e</i>): 415,5 (M+1)
119	(E)-N-metyl-3-(3-(4-(2-metyl-1H-indol-5-ylamino)pyrimidin-2-ylamino)fenyl)akrylamid 	MS (<i>m/e</i>): 399,2 (M+1)
120	N4-(2-metyl-1H-indol-5-yl)-N2-(3-(tetrahydro-2H-pyran-4-yloksy)fenyl)-pyrimidin-2,4-diamin 	MS (<i>m/e</i>): 416,4 (M+1)
121	N2-(3-(2-aminoetoksy)fenyl)-N4-(2-metyl-1H-indol-5-yl)pyrimidin-2,4-diamin 	MS (<i>m/e</i>): 375,3 (M+1)
122	N-(3-(4-(2-metyl-1H-indol-5-ylamino)-pyrimidin-2-ylamino)benzyl)-metansulfonamid 	MS (<i>m/e</i>): 423,4 (M+1)
123	N-(2-hidroksyetyl)-3-(4-(2-metyl-1H-indol-5-ylamino)pyrimidin-2-ylamino)benzamid 	MS (<i>m/e</i>): 403,2 (M+1)

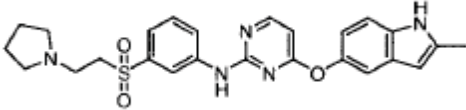
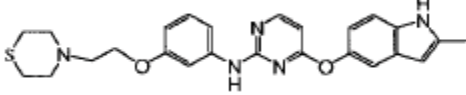
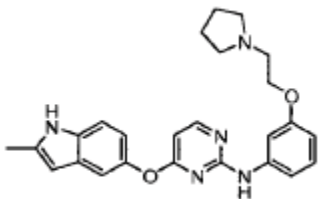
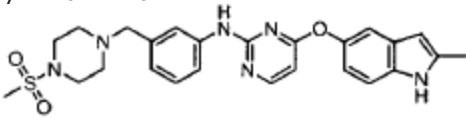
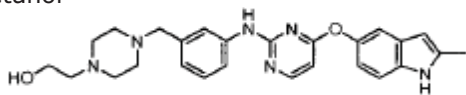
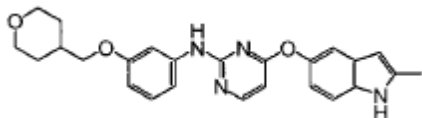
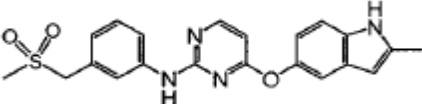
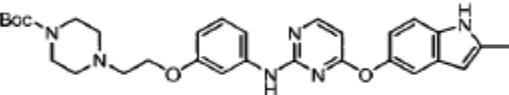
124	N-metyl-3-(3-(4-(2-metyl-1H-indol-5-ylamino)pyrimidin-2-ylamino)fenyl)-propanamid	MS (<i>m/e</i>): 401,2 (M+1)
		
125	3-(4-(2-metyl-1H-indol-5-ylamino)pyrimidin-2-ylamino)-N-(2-(metylamino)-2-oksoetyl)-benzamid	MS (<i>m/e</i>): 430,2 (M+1)
		
126	3-(4-(2-metyl-1H-indol-5-ylamino)pyrimidin-2-ylamino)-N-(2-morfolinoetyl)benzamid	MS (<i>m/e</i>): 472,3 (M+1)
		
127	3-(4-(2-metyl-1H-indol-5-ylamino)pyrimidin-2-ylamino)-N-(2-(piperidin-1-yl)etyl)-benzamid	MS (<i>m/e</i>): 470,1 (M+1)
		
128	trifluor-N-(3-(4-(2-metyl-1H-indol-5-ylamino)pyrimidin-2-ylamino)fenyl)-metansulfonamid	MS (<i>m/e</i>): 463,0 (M+1)
		
129	N-(2-metoksyetyl)-3-(4-(2-metyl-1H-indol-5-ylamino)pyrimidin-2-ylamino)benzamid	MS (<i>m/e</i>): 417,2 (M+1)
		

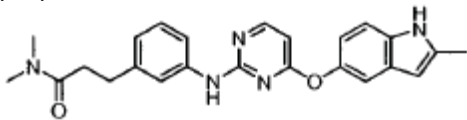
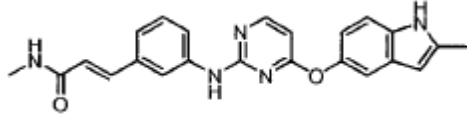
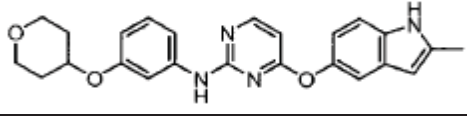
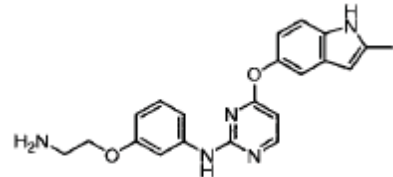
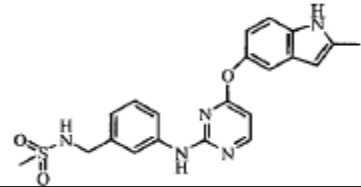
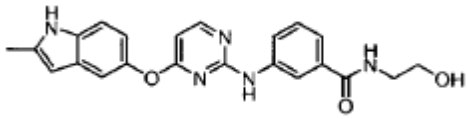
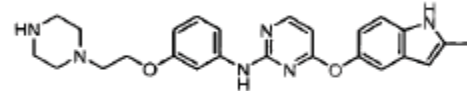
130	N-(4-(4-(2-metyl-1H-indol-5-ylamino)-pyrimidin-2-ylamino)fenyl)metansulfonamid	MS (<i>m/e</i>): 409,1 (M+1)
		
131	2-(3-(4-(2-metyl-1H-indol-5-ylamino)-pyrimidin-2-ylamino)fenyl)-N-(2-morfolinoetyl)acetamid	MS (<i>m/e</i>): 493,1 (M+1)
		
132	N2-(6-metoksypyridin-3-yl)-N4-(2-metyl-1H-indol-5-yl)pyrimidin-2,4-diamin	MS (<i>m/e</i>): 347,4 (M+1)
		
133	2-metyl-N-(4-(2-metyl-1H-indol-5-yloksy)-pyrimidin-2-yl)-1H-indol-5-amin	MS (<i>m/e</i>): 370,3 (M+1)
		
134	N-(3-(3-(dimetylamino)propoksy)fenyl)-4-(2-metyl-1H-indol-5-yloksy)pyrimidin-2-amin	MS (<i>m/e</i>): 418,4 (M+1)
		
135	2-(3-(4-(2-metyl-1H-indol-5-yloksy)-pyrimidin-2-ylamino)fenoksy)etanol	MS (<i>m/e</i>): 377,4 (M+1)
		
136	N-(3-(2-(dimetylamino)etoksy)fenyl)-4-(2-metyl-1H-indol-5-yloksy)pyrimidin-2-amin	MS (<i>m/e</i>): 404,4 (M+1)
		

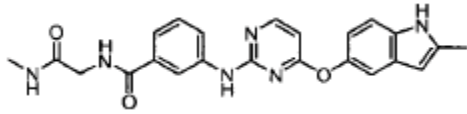
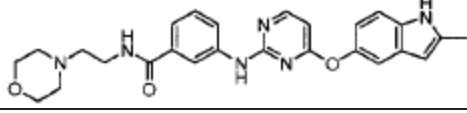
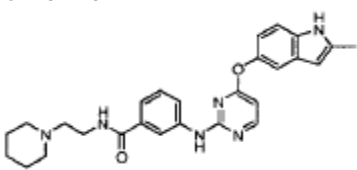
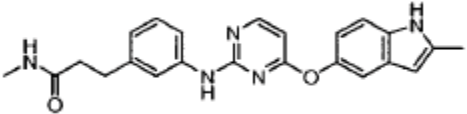
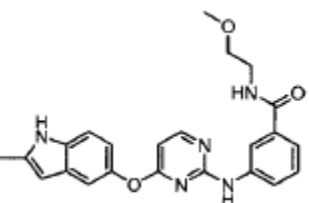
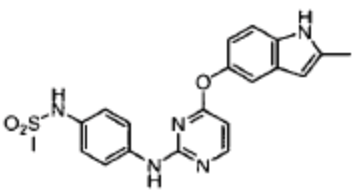
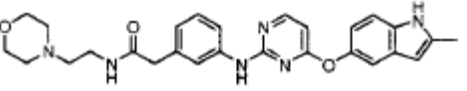
137	N-cyklopropyl-2-(3-(4-(2-metyl-1H-indol-5-yloksy)pyrimidin-2-ylamino)fenyl)acetamid	MS (<i>m/e</i>): 414,4 (M+1)
138	4-(2-metyl-1H-indol-5-yloksy)-N-(3-(3-(metylsulfonyl)propoksy)fenyl)pyrimidin-2-amin	MS (<i>m/e</i>): 453,4 (M+1)
139	4-(2-metyl-1H-indol-5-yloksy)-N-(3-(piperidin-4-ylmetoksy)fenyl)pyrimidin-2-amin	MS (<i>m/e</i>): 448,2 (M+1)
140	4-(2-metyl-1H-indol-5-yloksy)-N-(3-(piperidin-3-yloksy)fenyl)pyrimidin-2-amin	MS (<i>m/e</i>): 416,2 (M+1)
141	4-(2-metyl-1H-indol-5-yloksy)-N-(3-(piperidin-4-yloksy)fenyl)pyrimidin-2-amin	MS (<i>m/e</i>): 416,4 (M+1)
142	4-(2-metyl-1H-indol-5-yloksy)-N-(3-(1-(metylsulfonyl)piperidin-4-yloksy)fenyl)-pyrimidin-2-amin	MS (<i>m/e</i>): 494,5 (M+1)
143	1-(3-(4-(2-metyl-1H-indol-5-yloksy)-pyrimidin-2-ylamino)benzyl)piperidin-4-ol	MS (<i>m/e</i>): 430,4 (M+1)
144	(1-(3-(4-(2-metyl-1H-indol-5-yloksy)-pyrimidin-2-ylamino)benzyl)piperidin-4-yl)-metanol	MS (<i>m/e</i>): 444,4 (M+1)

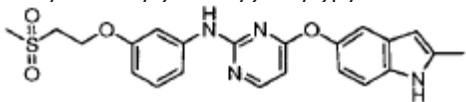
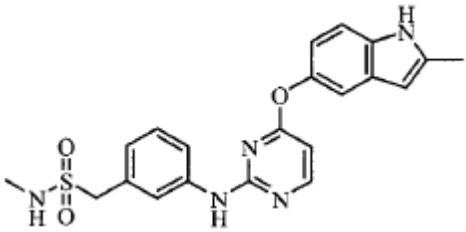
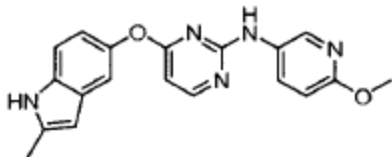
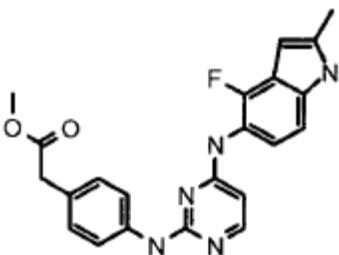
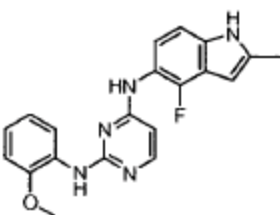
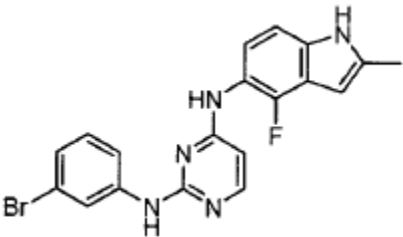
145	2-(1-(3-(4-(2-metyl-1H-indol-5-yloksy)-pyrimidin-2-ylamino)benzyl)piperidin-4-yl)-etanol	MS (<i>m/e</i>): 458,5 (M+1)
		
146	N-(3-(4-(2-metyl-1H-indol-5-yloksy)-pyrimidin-2-ylamino)fenyl)metansulfonamid	MS (<i>m/e</i>): 409,12 (M+1)
		
147	(S)-4-(2-metyl-1H-indol-5-yloksy)-N-(3-(1-(metylsulfonyl)pyrrolidin-3-yloksy)fenyl)-pyrimidin-2-amin	MS (<i>m/e</i>): 480,5 (M+1)
		
148	(E)-N,N-dimetyl-3-(3-(4-(2-metyl-1H-indol-5-yloksy)pyrimidin-2-ylamino)fenyl)-akrylamid	MS (<i>m/e</i>): 414,5 (M+1)
		
149	3-(3-(4-(2-metyl-1H-indol-5-yloksy)-pyrimidin-2-ylamino)fenyl)-1-morfolinopropan-1-on	MS (<i>m/e</i>): 458,5 (M+1)
		
150	N-(3-(2-metoksyetoksy)fenyl)-4-(2-metyl-1H-indol-5-yloksy)pyrimidin-2-amin	MS (<i>m/e</i>): 391,0 (M+1)
		
151	4-(2-metyl-1H-indol-5-yloksy)-N-(3-(morfolinosulfonyl)fenyl)pyrimidin-2-amin	MS (<i>m/e</i>): 465,1 (M+1)
		
152	N-(2-(3-(4-(2-metyl-1H-indol-5-yloksy)-pyrimidin-2-ylamino)fenoksy)etyl)-metansulfonamid	MS (<i>m/e</i>): 454,2 (M+1)
		

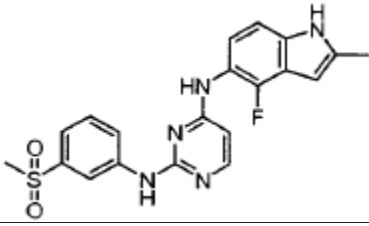
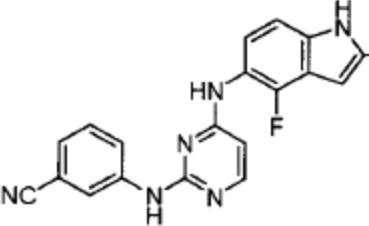
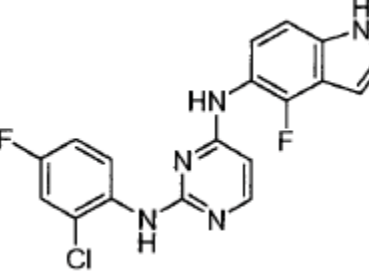
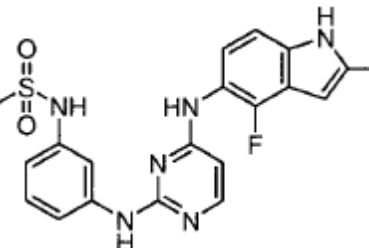
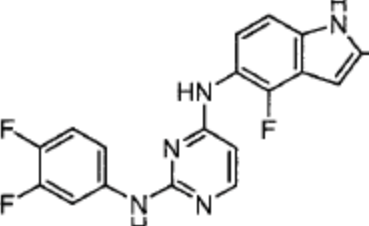
153	(R)-4-(2-metyl-1H-indol-5-yloksy)-N-(3-(1-(metylsulfonyl)pyrrolidin-3-yloksy)fenyl)-pyrimidin-2-amin 	MS (<i>m/e</i>): 480,5 (M+1)
154	4-(2-metyl-1H-indol-5-yloksy)-N-(3-(2-morfolinoetoksy)fenyl)pyrimidin-2-amin 	MS (<i>m/e</i>): 446,4 (M+1)
155	N-(2-(dimetylamino)etyl)-3-(4-(2-metyl-1H-indol-5-yloksy)pyrimidin-2-ylamino)-benzamid 	MS (<i>m/e</i>): 431,4 (M+1)
156	N-(3-(2-metoksyetoksy)fenyl)-4-(2-metyl-1H-indol-5-yloksy)pyrimidin-2-amin 	MS (<i>m/e</i>): 391,3 (M+1)
157	4-(2-metyl-1H-indol-5-yloksy)-N-(3-(morfolinometyl)fenyl)pyrimidin-2-amin 	MS (<i>m/e</i>): 416,4 (M+1)
158	4-(2-metyl-1H-indol-5-yloksy)-N-(3-(3-tiomorfolinopropoksy)fenyl)pyrimidin-2-amin 	MS (<i>m/e</i>): 476,5 (M+1)
159	N-(3-(2-(dimetylamino)etylsulfonyl)fenyl)-4-(2-metyl-1H-indol-5-yloksy)pyrimidin-2-amin 	MS (<i>m/e</i>): 452,4 (M+1)
160	4-(2-metyl-1H-indol-5-yloksy)-N-(3-(2-morfolinoetylsulfonyl)fenyl)pyrimidin-2-amin 	MS (<i>m/e</i>): 494,4 (M+1)

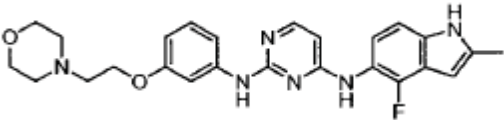
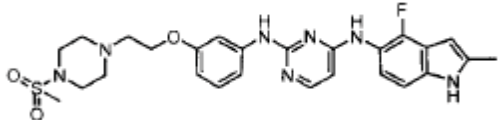
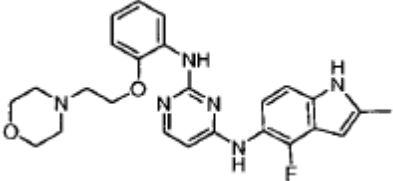
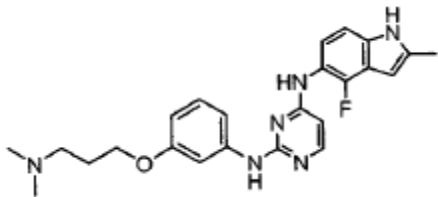
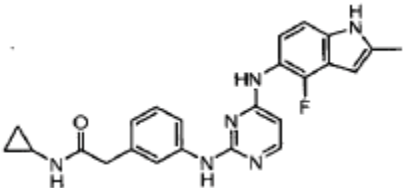
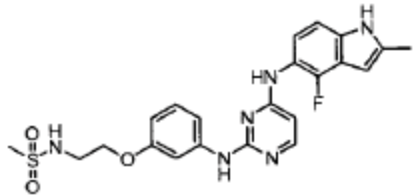
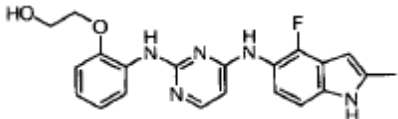
161	4-(2-metyl-1H-indol-5-yloksy)-N-(3-(2-(pyrrolidin-1-yl)etylsulfonyl)fenyl)pyrimidin-2-amin 	MS (<i>m/e</i>): 478,4 (M+1)
162	4-(2-metyl-1H-indol-5-yloksy)-N-(3-(2-tiomorfolinoetoksy)fenyl)pyrimidin-2-amin 	MS (<i>m/e</i>): 462,4 (M+1)
163	4-(2-metyl-1H-indol-5-yloksy)-N-(3-(2-(pyrrolidin-1-yl)etoksy)fenyl)pyrimidin-2-amin 	MS (<i>m/e</i>): 430,3 (M+1)
164	4-(2-metyl-1H-indol-5-yloksy)-N-(3-((4-(metylsulfonyl)piperazin-1-yl)-metyl)fenyl)-pyrimidin-2-amin 	MS (<i>m/e</i>): 493,5 (M+1)
165	2-(4-(3-(4-(2-metyl-1H-indol-5-yloksy)-pyrimidin-2-ylamino)benzyl)piperazin-1-yl)-etanol 	MS (<i>m/e</i>): 459,5 (M+1)
166	4-(2-metyl-1H-indol-5-yloksy)-N-(3-((tetrahydro-2H-pyran-4-yl)metoksy)fenyl)-pyrimidin-2-amin 	MS (<i>m/e</i>): 431,3 (M+1)
167	4-(2-metyl-1H-indol-5-yloksy)-N-(3-(metylsulfonylmetyl)fenyl)pyrimidin-2-amin 	MS (<i>m/e</i>): 409,4 (M+1)
168	tert-butyl-4-(2-(3-(4-(2-metyl-1H-indol-5-yloksy)pyrimidin-2-ylamino)fenoksy)etyl)-piperazin-1-karboksylat 	MS (<i>m/e</i>): 545,4 (M+1)

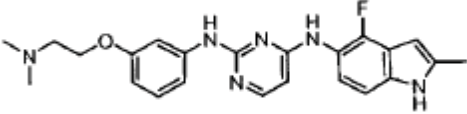
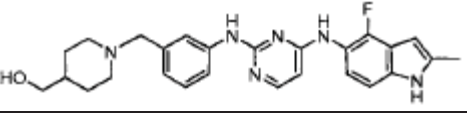
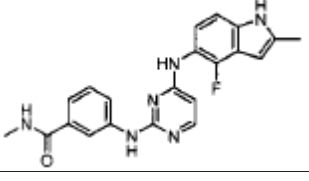
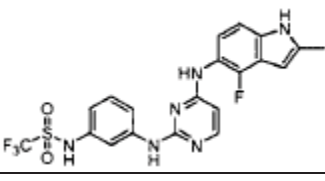
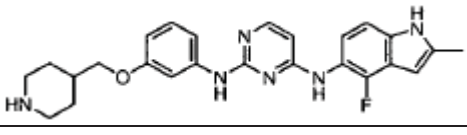
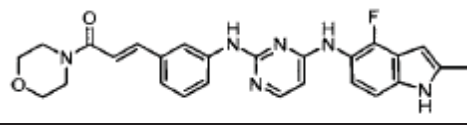
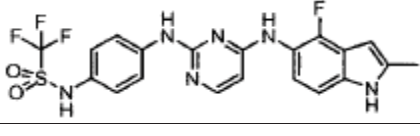
169	N,N-dimetyl-3-(3-(4-(2-metyl-1H-indol-5-yloksy)pyrimidin-2-ylamino))fenyl)-propanamid 	MS (<i>m/e</i>): 416,5 (M+1)
170	(E)-N-metyl-3-(3-(4-(2-metyl-1H-indol-5-yloksy)pyrimidin-2-ylamino)fenyl)akrylamid 	MS (<i>m/e</i>): 400,2 (M+1)
171	4-(2-metyl-1H-indol-5-yloksy)-N-(3-(tetrahydro-2H-pyran-4-yloksy)fenyl)-pyrimidin-2-amin 	MS (<i>m/e</i>): 416,18 (M+1)
172	N-(3-(2-aminoetoksy)fenyl)-4-(2-metyl-1H-indol-5-yloksy)pyrimidin-2-amin 	MS (<i>m/e</i>): 376,3 (M+1)
173	N-(3-(4-(2-metyl-1H-indol-5-yloksy)-pyrimidin-2-ylamino)benzyl)-metansulfonamid 	MS (<i>m/e</i>): 424,4 (M+1)
174	N-(2-hidroksyetyl)-3-(4-(2-metyl-1H-indol-5-yloksy)pyrimidin-2-ylamino)benzamid 	MS (<i>m/e</i>): 404,1 (M+1)
175	4-(2-metyl-1H-indol-5-yloksy)-N-(3-(2-(piperazin-1-yl)etoksy)fenyl)pyrimidin-2-amin 	MS (<i>m/e</i>): 444,5 (M)

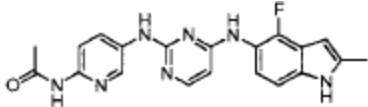
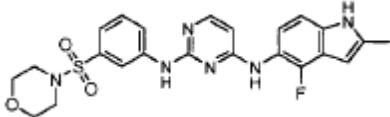
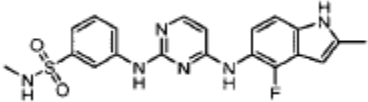
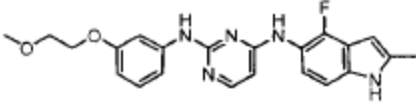
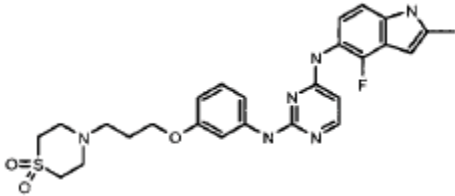
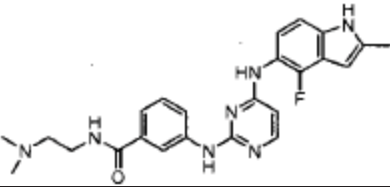
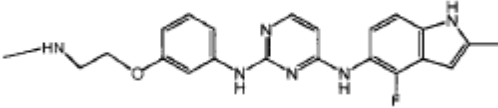
176	3-(4-(2-metyl-1H-indol-5-yloksy)pyrimidin-2-ylamino)-N-(2-(metylamino)-2-oksoetyl)-benzamid 	MS (<i>m/e</i>): 431,2 (M+1)
177	3-(4-(2-metyl-1H-indol-5-yloksy)pyrimidin-2-ylamino)-N-(2-morfolinoetyl)benzamid 	MS (<i>m/e</i>): 473,0 (M+1)
178	3-(4-(2-metyl-1H-indol-5-yloksy)pyrimidin-2-ylamino)-N-(2-(piperidin-1-yl)etyl)-benzamid 	MS (<i>m/e</i>): 471,4 (M+1)
179	N-metyl-3-(3-(4-(2-metyl-1H-indol-5-yloksy)pyrimidin-2-ylamino))fenyl)-propanamid 	MS (<i>m/e</i>): 402,2 (M+1)
180	N-(2-metoksyetyl)-3-(4-(2-metyl-1H-indol-5-yloksy)pyrimidin-2-ylamino)benzamid 	MS(<i>m/e</i>): 418,1 (M+1)
181	N-(4-(4-(2-metyl-1H-indol-5-yloksy)-pyrimidin-2-ylamino)fenyl)metansulfonamid 	MS (<i>m/e</i>): 410,2 (M+1)
182	2-(3-(4-(2-metyl-1H-indol-5-yloksy)-pyrimidin-2-ylamino)fenyl)-N-(2-morfolinoetyl)acetamid 	MS (<i>m/e</i>): 487,1 (M+1)

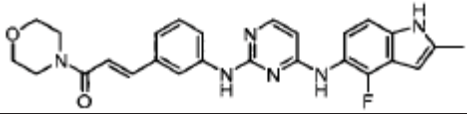
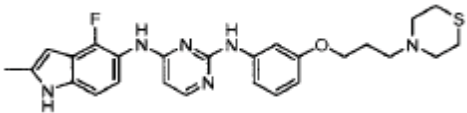
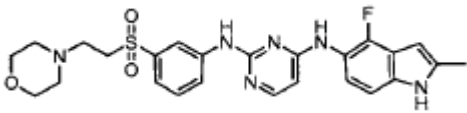
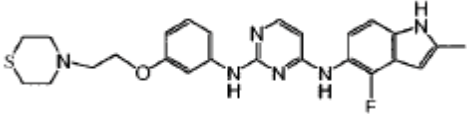
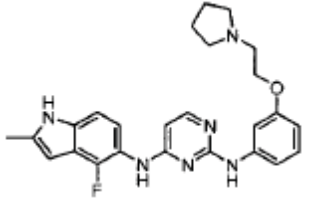
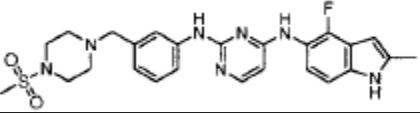
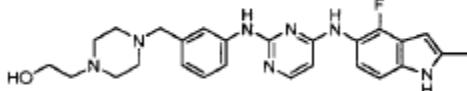
183	4-(2-metyl-1H-indol-5-yloksy)-N-(3-(2-(metylsulfonyl)etoksy)fenyl)pyrimidin-2-amin 	MS (<i>m/e</i>): 439,2 (M+1)
184	N-metyl(3-(4-(2-metyl-1H-indol-5-yloksy)-pyrimidin-2-ylamino)fenyl)metansulfonamid 	MS (<i>m/e</i>): 424,4 (M+1)
185	N-(6-metoksypyridin-3-yl)-4-(2-metyl-1H-indol-5-yloksy)pyrimidin-2-amin 	MS (<i>m/e</i>): 348,2 (M+1)
186	metyl-2-(4-(4-(4-fluor-2-metyl-1H-indol-5-ylamino)pyrimidin-2-ylamino)fenyl)acetat 	MS (<i>m/e</i>): 406,2 (M+1)
187	N4-(4-fluor-2-metyl-1H-indol-5-yl)-N2-(2-metoksifyenyl)pyrimidin-2,4-diamin 	MS (<i>m/e</i>): 364,2 (M+1)
188	N2-(3-bromfenyl)-N4-(4-fluor-2-metyl-1H-indol-5-yl)pyrimidin-2,4-diamin 	MS (<i>m/e</i>): 412,3 (M+1)

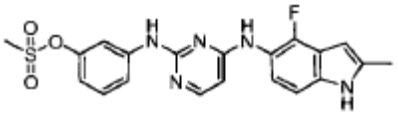
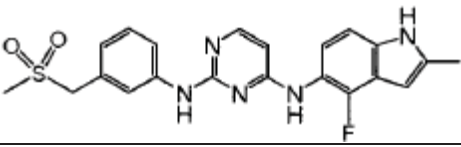
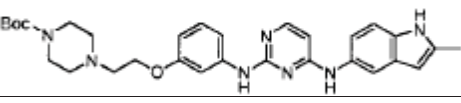
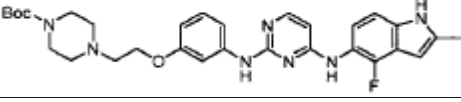
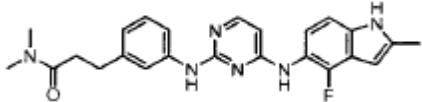
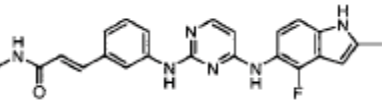
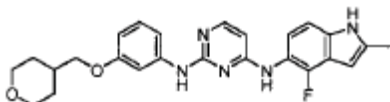
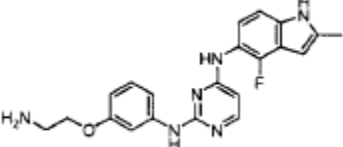
189	N4-(4-fluor-2-metyl-1H-indol-5-yl)-N2-(3-(metylsulfonyl)fenyl)pyrimidin-2,4-diamin	MS (<i>m/e</i>): 412,3 (M+1)
		
190	3-(4-(4-fluor-2-metyl-1H-indol-5-ylamino)-pyrimidin-2-ylamino)benzonitril	MS (<i>m/e</i>): 359,3 (M+1)
		
191	N2-(2-klor-4-fluorfenyl)-N4-(4-fluor-2-metyl-1H-indol-5-yl)pyrimidin-2,4-diamin	MS (<i>m/e</i>): 386,2 (M+1)
		
192	N-(3-(4-(4-fluor-2-metyl-1H-indol-5-ylamino)pyrimidin-2-ylamino)fenyl)-metansulfonamid	MS (<i>m/e</i>): 427,3 (M+1)
		
193	N2-(3,4-difluorfenyl)-N4-(4-fluor-2-metyl-1H-indol-5-yl)pyrimidin-2,4-diamin	MS (<i>m/e</i>): 370,2 (M+1)
		

194	N4-(4-fluor-2-metyl-1H-indol-5-yl)-N2-(3-(2-morfolinoetoksy)fenyl)pyrimidin-2,4-diamin	MS (<i>m/e</i>): 463,4 (M+1)
		
195	N4-(4-fluor-2-metyl-1H-indol-5-yl)-N2-(3-(2-(4-(metylsulfonyl)piperazin-1-yl)-etoksy)-fenyl)pyrimidin-2,4-diamin	MS (<i>m/e</i>): 540,3 (M+1)
		
196	N4-(4-fluor-2-metyl-1H-indol-5-yl)-N2-(2-(2-morfolinoetoksy)fenyl)pyrimidin-2,4-diamin	MS (<i>m/e</i>): 462,3 (M)
		
197	N2-(3-(3-(dimetylamino)propoksy)fenyl)-N4-(4-fluor-2-metyl-1H-indol-5-yl)pyrimidin-2,4-diamin	MS (<i>m/e</i>): 435,4 (M+1)
		
198	N-cyklopropyl-2-(3-(4-(4-fluor-2-metyl-1H-indol-5-ylamino)pyrimidin-2-ylamino)fenyl)-acetamid	MS (<i>m/e</i>): 431,4 (M+1)
		
199	N-(2-(3-(4-(4-fluor-2-metyl-1H-indol-5-ylamino)pyrimidin-2-ylamino)fenoksy)etyl)-metansulfonamid	MS (<i>m/e</i>): 471,4 (M+1)
		
200	2-(2-(4-(4-fluor-2-metyl-1H-indol-5-ylamino)pyrimidin-2-ylamino)fenoksy)etanol	MS (<i>m/e</i>): 394,4 (M+1)
		

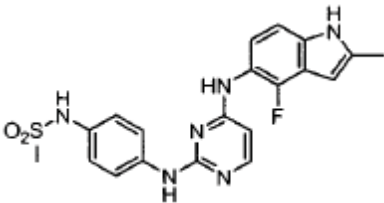
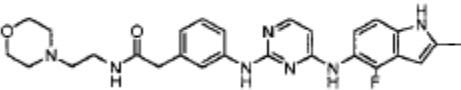
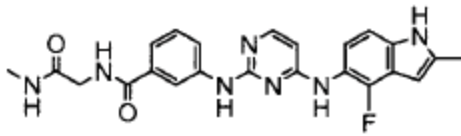
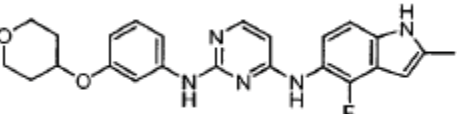
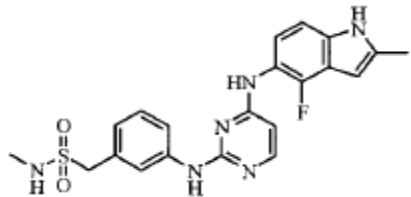
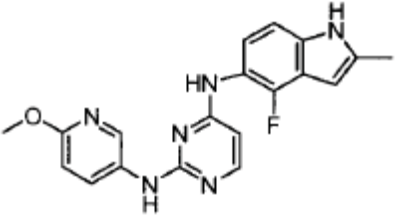
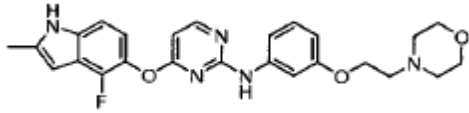
201	N2-(3-(2-(dimetylamino)etoksy)fenyl)-N4-(4-fluor-2-metyl-1H-indol-5-yl)pyrimidin-2,4-diamin 	MS (<i>m/e</i>): 421,4 (M+1)
202	(1-(3-(4-(4-fluor-2-metyl-1H-indol-5-ylamino)pyrimidin-2-ylamino)benzyl)-piperidin-4-yl)metanol 	MS (<i>m/e</i>): 461,5 (M+1)
203	3-(4-(4-fluor-2-metyl-1H-indol-5-ylamino)-pyrimidin-2-ylamino)-N-metylbenzamid 	MS (<i>m/e</i>): 391,3 (M+1)
204	trifluor-N-(3-(4-(4-fluor-2-metyl-1H-indol-5-ylamino)pyrimidin-2-ylamino)fenyl)-metansulfonamid 	MS (<i>m/e</i>): 481,3 (M+1)
205	N4-(4-fluor-2-metyl-1H-indol-5-yl)-N2-(3-(piperidin-4-ylmetoksy)fenyl)pyrimidin-2,4-diamin 	MS (<i>m/e</i>): 446,22 (M+1)
206	(E)-3-(3-(4-(4-fluor-2-metyl-1H-indol-5-ylamino)pyrimidin-2-ylamino)fenyl)-1-morfolinoprop-2-en-1-on 	MS (<i>m/e</i>): 473,5 (M+1)
207	trifluor-N-(4-(4-(4-fluor-2-metyl-1H-indol-5-ylamino)pyrimidin-2-ylamino)fenyl)-metansulfonamid 	MS (<i>m/e</i>): 481,3 (M+1)

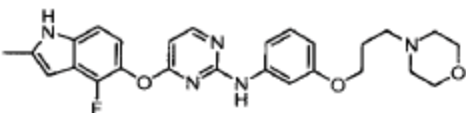
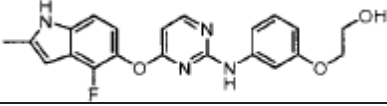
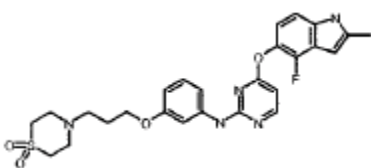
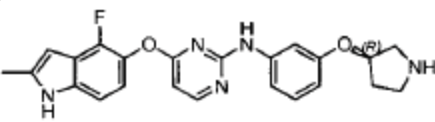
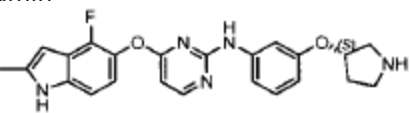
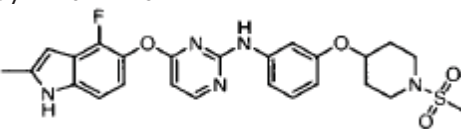
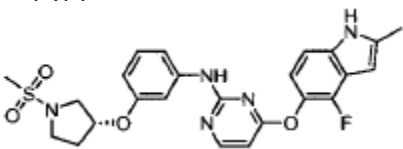
208	N-(5-(4-(4-fluor-2-metyl-1H-indol-5-ylamino)pyrimidin-2-ylamino)pyridin-2-yl)-acetamid 	MS (<i>m/e</i>): 392,4 (M+1)
209	N4-(4-fluor-2-metyl-1H-indol-5-yl)-N2-(3-(morfolinosulfonyl)fenyl)pyrimidin-2,4-diamin 	MS (<i>m/e</i>): 483,5 (M+1)
210	3-(4-(4-fluor-2-metyl-1H-indol-5-ylamino)-pyrimidin-2-ylamino)-N-metylbenzensulfonamid 	MS (<i>m/e</i>): 427,1 (M+1)
211	N4-(4-fluor-2-metyl-1H-indol-5-yl)-N2-(3-(2-metoksyetoksy)fenyl)pyrimidin-2,4-diamin 	MS (<i>m/e</i>): 408,4 (M+1)
212	4-(4-fluor-2-metyl-1H-indol-5-yl)-N-(3-(3-(tiomorfolino-1',1'-dioksid)propoksy)fenyl)-pyrimidin-2-amin 	MS (<i>m/e</i>): 525,5 (M+1)
213	N-(2-(dimetylamino)etyl)-3-(4-(4-fluor-2-metyl-1H-indol-5-ylamino)pyrimidin-2-ylamino)benzamid 	MS (<i>m/e</i>): 448,5 (M+1)
214	N4-(4-fluor-2-metyl-1H-indol-5-yl)-N2-(3-(2-(metylamino)etoksy)fenyl)pyrimidin-2,4-diamin 	MS (<i>m/e</i>): 407,5 (M+1)

215	(E)-3-(3-(4-(4-fluor-2-metyl-1H-indol-5-ylamino)pyrimidin-2-ylamino)fenyl)-1-morfolinoprop-2-en-1-on	MS (<i>m/e</i>): 473,1 (M+1)
		
216	N4-(4-fluor-2-metyl-1H-indol-5-yl)-N2-(3-(3-tiomorfolinopropoksy)fenyl)pyrimidin-2,4-diamin	MS (<i>m/e</i>): 493,5 (M+1)
		
217	N4-(4-fluor-2-metyl-1H-indol-5-yl)-N2-(3-(2-morfolinoetylsulfonyl)fenyl)pyrimidin-2,4-diamin	MS (<i>m/e</i>): 511,4 (M+1)
		
218	N4-(4-fluor-2-metyl-1H-indol-5-yl)-N2-(3-(2-tiomorfolinoetoksy)fenyl)pyrimidin-2,4-diamin	MS (<i>m/e</i>): 479,4 (M+1)
		
219	N4-(4-fluor-2-metyl-1H-indol-5-yl)-N2-(3-(2-(pyrrolidin-1-yl)etoksy)fenyl)pyrimidin-2,4-diamin	MS (<i>m/e</i>): 447,4 (M+1)
		
220	N4-(4-fluor-2-metyl-1H-indol-5-yl)-N2-(3-((4-(metylsulfonyl)piperazin-1-yl)-metyl)-fenyl)pyrimidin-2,4-diamin	MS (<i>m/e</i>): 510,4 (M+1)
		
221	2-(4-(3-(4-(4-fluor-2-metyl-1H-indol-5-ylamino)pyrimidin-2-ylamino)benzyl)-piperazin-1-yl)etanol	MS (<i>m/e</i>): 474,7 (M-1)
		

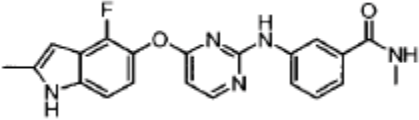
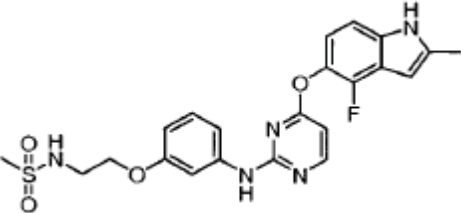
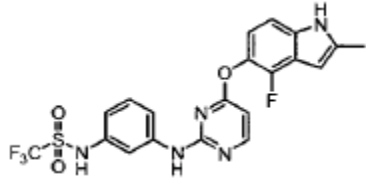
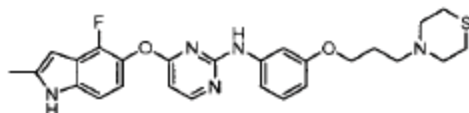
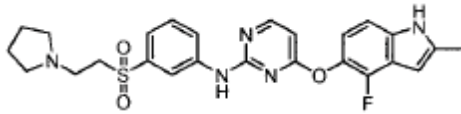
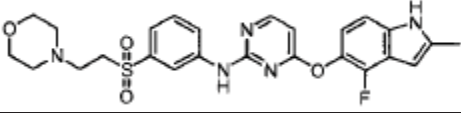
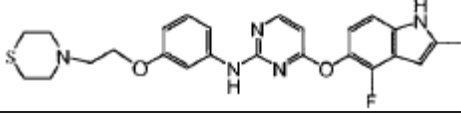
222	3-(4-(4-fluor-2-metyl-1H-indol-5-ylamino)-pyrimidin-2-ylamino)fenylmetansulfonat 	MS (<i>m/e</i>): 428,4 (M+1)
223	N4-(4-fluor-2-metyl-1H-indol-5-yl)-N2-(3-(metylsulfonylmetyl)fenyl)pyrimidin-2,4-diamin 	MS (<i>m/e</i>): 426,4 (M+1)
224	tert-butyl-4-(2-(3-(4-(2-metyl-1H-indol-5-ylamino)pyrimidin-2-ylamino)fenoksy)etyl)-piperazin-1-karboksylat 	MS (<i>m/e</i>): 544,4 (M+1)
225	tert-butyl-4-(2-(3-(4-(4-fluor-2-metyl-1H-indol-5-ylamino)pyrimidin-2-ylamino)-fenoksy)etyl)piperazin-1-karboksylat 	MS (<i>m/e</i>): 562,3 (M+1)
226	3-(3-(4-(4-fluor-2-metyl-1H-indol-5-ylamino)pyrimidin-2-ylamino))fenyl)-N,N-dimetylpropanamid 	MS (<i>m/e</i>): 433,4 (M+1)
227	(E)-3-(3-(4-(4-fluor-2-metyl-1H-indol-5-ylamino)pyrimidin-2-ylamino)fenyl)-N-metylakrylamid 	MS (<i>m/e</i>): 417,2 (M+1)
228	N4-(4-fluor-2-metyl-1H-indol-5-yl)-N2-(3-((tetrahydro-2H-pyran-4-yl)metoksy)fenyl)-pyrimidin-2,4-diamin 	MS (<i>m/e</i>): 448,4 (M+1)
229	N2-(3-(2-aminoetoksy)fenyl)-N4-(4-fluor-2-metyl-1H-indol-5-yl)pyrimidin-2,4-diamin 	MS (<i>m/e</i>): 393,2 (M+1)

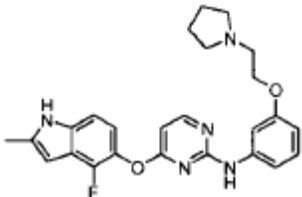
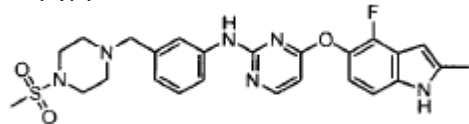
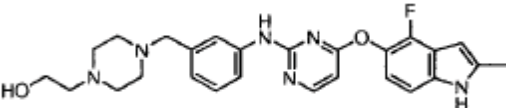
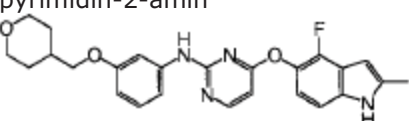
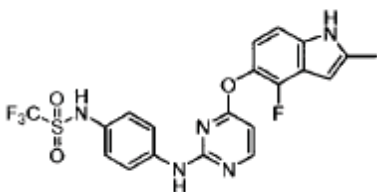
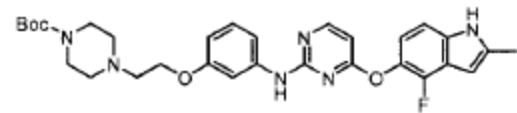
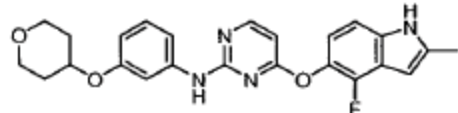
230	N-(3-(4-(4-fluor-2-metyl-1H-indol-5-ylamino)pyrimidin-2-ylamino)benzyl)-metansulfonamid	MS (<i>m/e</i>): 441,4 (M+1)
231	3-(4-(4-fluor-2-metyl-1H-indol-5-ylamino)-pyrimidin-2-ylamino)-N-(2-hidroksyetyl)-benzamid	MS (<i>m/e</i>): 421,2 (M+1)
232	3-(4-(4-fluor-2-metyl-1H-indol-5-ylamino)-pyrimidin-2-ylamino)-N-(2-morfolinoetyl)-benzamid	MS (<i>m/e</i>): 490,1 (M+1)
233	3-(4-(4-fluor-2-metyl-1H-indol-5-ylamino)-pyrimidin-2-ylamino)-N-(2-(piperidin-1-yl)-etyl)benzamid	MS (<i>m/e</i>): 488,4 (M+1)
234	3-(3-(4-(4-fluor-2-metyl-1H-indol-5-ylamino)pyrimidin-2-ylamino)fenyl)-N-metylpropanamid	MS (<i>m/e</i>): 419,2 (M+1)
235	3-(4-(4-fluor-2-metyl-1H-indol-5-ylamino)-pyrimidin-2-ylamino)-N-(2-metoksyetyl)-benzamid	MS (<i>m/e</i>): 435,2 (M+1)

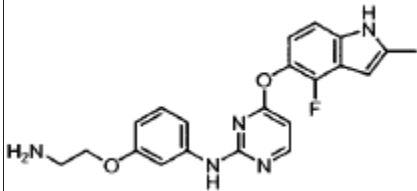
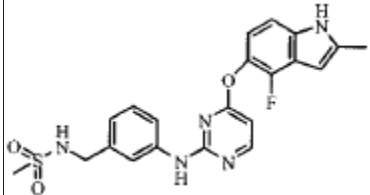
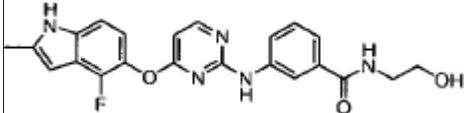
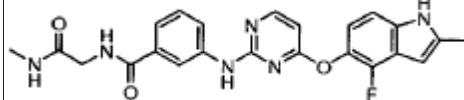
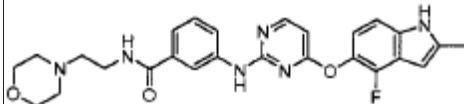
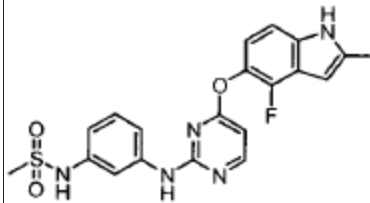
236	N-(4-(4-(4-fluor-2-metyl-1H-indol-5-ylamino)pyrimidin-2-ylamino)fenyl)-metansulfonamid 	MS (<i>m/e</i>): 427,2 (M+1)
237	2-(3-(4-(4-fluor-2-metyl-1H-indol-5-ylamino)pyrimidin-2-ylamino)fenyl)-N-(2-morfolinoetyl)acetamid 	MS (<i>m/e</i>): 504,1 (M+1)
238	3-(4-(4-fluor-2-metyl-1H-indol-5-ylamino)-pyrimidin-2-ylamino)-N-(2-(metylamino)-2-oksoetyl)benzamid 	MS (<i>m/e</i>): 448,2 (M+1)
239	N4-(4-fluor-2-metyl-1H-indol-5-yl)-N2-(3-(tetrahydro-2H-pyran-4-yloksy)fenyl)-pyrimidin-2,4-diamin 	MS (<i>m/e</i>): 434,4 (M+1)
240	1-(3-(4-(4-fluor-2-metyl-1H-indol-5-ylamino)pyrimidin-2-ylamino)benzyl)-sulfonylmetylamín 	MS (<i>m/e</i>): 441,4 (M+1)
241	N4-(4-fluor-2-metyl-1H-indol-5-yl)-N2-(6-metoksypyridin-3-yl)pyrimidin-2,4-diamin 	MS (<i>m/e</i>): 365,4 (M+1)
242	4-(4-fluor-2-metyl-1H-indol-5-yloksy)-N-(3-(2-morfolinoetoksy)fenyl)pyrimidin-2-amin 	MS (<i>m/e</i>): 464,4 (M+1)

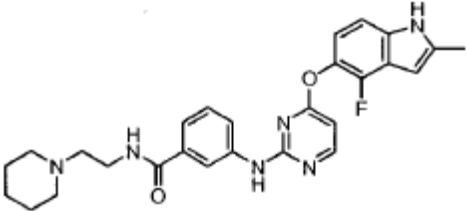
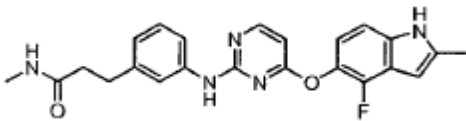
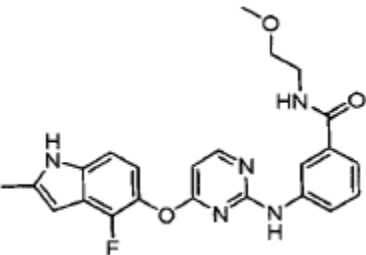
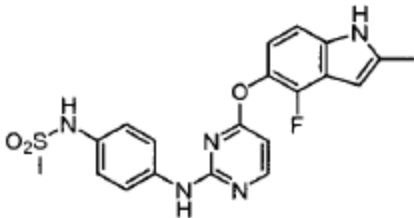
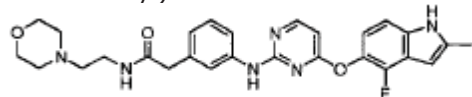
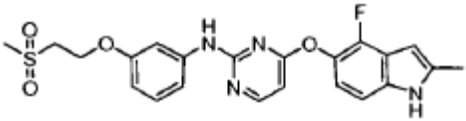
243	4-(4-fluor-2-metyl-1H-indol-5-yloksy)-N-(3-(3-morfolinopropoksy)fenyl)pyrimidin-2-amin	MS (<i>m/e</i>): 478,4 (M+1)
		
244	2-(3-(4-(4-fluor-2-metyl-1H-indol-5-yloksy)-pyrimidin-2-ylamino)fenoksy)etanol	MS (<i>m/e</i>): 395,4 (M+1)
		
245	4-(4-fluor-2-metyl-1H-indol-5-yloksy)-N-(3-(3-(tiomorfolino-1',1'-dioksid)-propoksy)-fenyl)pyrimidin-2-amin	MS (<i>m/e</i>): 526,7 (M+1)
		
246	(R)-4-(4-fluor-2-metyl-1H-indol-5-yloksy)-N-(3-(pyrrolidin-3-yloksy)fenyl)pyrimidin-2-amin	MS (<i>m/e</i>): 420,5 (M+1)
		
247	(S)-4-(4-fluor-2-metyl-1H-indol-5-yloksy)-N-(3-(pyrrolidin-3-yloksy)fenyl)pyrimidin-2-amin	MS (<i>m/e</i>): 420,5 (M+1)
		
248	4-(4-fluor-2-metyl-1H-indol-5-yloksy)-N-(3-(1-(metylsulfonyl)piperidin-4-yloksy)fenyl)-pyrimidin-2-amin	MS (<i>m/e</i>): 512,4 (M+1)
		
249	(R)-4-(4-fluor-2-metyl-1H-indol-5-yloksy)-N-(3-(1-(metylsulfonyl)pyrrolidin-3-yloksy)-fenyl)pyrimidin-2-amin	MS (<i>m/e</i>): 498,4 (M+1)
		

250	N-(2-(dimethylamino)ethyl)-3-(4-(4-fluor-2-metyl-1H-indol-5-yloksy)pyrimidin-2-ylamino)benzamid	MS (<i>m/e</i>): 448,5 (M+1)
251	(1-(3-(4-(4-fluor-2-metyl-1H-indol-5-yloksy)pyrimidin-2-ylamino)benzyl)piperidin-4-yl)metanol	MS (<i>m/e</i>): 462,4 (M+1)
252	2-(1-(3-(4-(4-fluor-2-metyl-1H-indol-5-yloksy)pyrimidin-2-ylamino)benzyl)piperidin-4-yl)etanol	MS (<i>m/e</i>): 476,5 (M+1)
253	4-(4-fluor-2-metyl-1H-indol-5-yloksy)-N-(3-(2-(metylamino)etoksy)fenyl)pyrimidin-2-amin	MS (<i>m/e</i>): 408,4 (M+1)
254	(E)-3-(3-(4-(4-fluor-2-metyl-1H-indol-5-yloksy)pyrimidin-2-ylamino)fenyl)-1-morfolinoprop-2-en-1-on	MS (<i>m/e</i>): 474,5 (M+1)
255	4-(4-fluor-2-metyl-1H-indol-5-yloksy)-N-(3-(morfolinometyl)fenyl)pyrimidin-2-amin	MS (<i>m/e</i>): 434,5 (M+1)
256	(S)-4-(4-fluor-2-metyl-1H-indol-5-yloksy)-N-(3-(1-(metylsulfonyl)pyrrolidin-3-yloksy)-fenyl)pyrimidin-2-amin	MS (<i>m/e</i>): 498,4 (M+1)

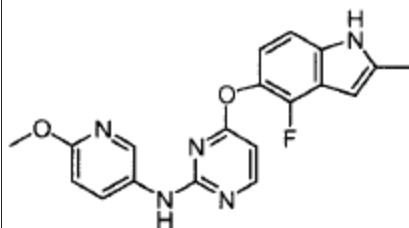
257	3-(4-(4-fluor-2-metyl-1H-indol-5-yloksy)-pyrimidin-2-ylamino)-N-metylbenzamid 	MS (<i>m/e</i>): 392,4 (M+1)
258	N-(2-(3-(4-(4-fluor-2-metyl-1H-indol-5-yloksy)pyrimidin-2-ylamino)fenoksy)etyl)-metansulfonamid 	MS (<i>m/e</i>): 472,4 (M+1)
259	trifluor-N-(3-(4-(4-fluor-2-metyl-1H-indol-5-yloksy)pyrimidin-2-ylamino)fenyl)-metansulfonamid 	MS (<i>m/e</i>): 482,3 (M+1)
260	4-(4-fluor-2-metyl-1H-indol-5-yloksy)-N-(3-(3-tiomorfolinopropoksy)fenyl)pyrimidin-2-amin 	MS (<i>m/e</i>): 494,5 (M+1)
261	4-(4-fluor-2-metyl-1H-indol-5-yloksy)-N-(3-(2-(pyrrolidin-1-yl)etylsulfonyl)fenyl)-pyrimidin-2-amin 	MS (<i>m/e</i>): 496,4 (M+1)
262	4-(4-fluor-2-metyl-1H-indol-5-yloksy)-N-(3-(2-morfolinoetylsulfonyl)fenyl)pyrimidin-2-amin 	MS (<i>m/e</i>): 512,4 (M+1)
263	4-(4-fluor-2-metyl-1H-indol-5-yloksy)-N-(3-(2-tiomorfolinoetoksy)fenyl)pyrimidin-2-amin 	MS (<i>m/e</i>): 480,4 (M+1)

264	4-(4-fluor-2-metyl-1H-indol-5-yloksy)-N-(3-(2-(pyrrolidin-1-yl)etoksy)fenyl)pyrimidin-2-amin	MS (<i>m/e</i>): 448,4 (M+1)
		
265	4-(4-fluor-2-metyl-1H-indol-5-yloksy)-N-(3-((4-(metylsulfonyl)piperazin-1-yl)-metyl)-fenyl)pyrimidin-2-amin	MS (<i>m/e</i>): 511,4 (M+1)
		
266	2-(4-(3-(4-(4-fluor-2-metyl-1H-indol-5-yloksy)pyrimidin-2-ylamino)benzyl)piperazin-1-yl)etanol	MS (<i>m/e</i>): 477,5 (M+1)
		
267	4-(4-fluor-2-metyl-1H-indol-5-yloksy)-N-(3-((tetrahydro-2H-pyran-4-yl)metoksy)fenyl)-pyrimidin-2-amin	MS (<i>m/e</i>): 449,4 (M+1)
		
268	trifluor-N-(4-(4-(4-fluor-2-metyl-1H-indol-5-yloksy)pyrimidin-2-ylamino)fenyl)-metansulfonamid	MS (<i>m/e</i>): 482,3 (M+1)
		
269	tert-butyl-4-(2-(3-(4-(4-fluor-2-metyl-1H-indol-5-yloksy)pyrimidin-2-ylamino)-fenoksy)etyl)piperazin-1-karboksylat	MS (<i>m/e</i>): 563,4 (M+1)
		
270	4-(4-fluor-2-metyl-1H-indol-5-yloksy)-N-(3-(tetrahydro-2H-pyran-4-yloksy)fenyl)-pyrimidin-2-amin	MS (<i>m/e</i>): 435,4 (M+1)
		

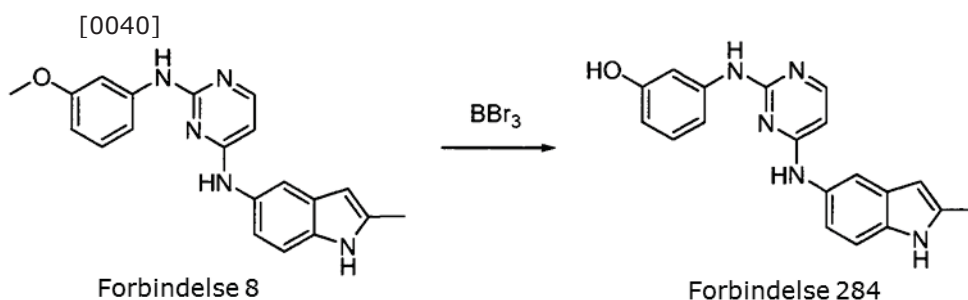
271	N-(3-(2-aminoetoksy)fenyl)-4-(4-fluor-2-metyl-1H-indol-5-yloksy)pyrimidin-2-amin	MS (<i>m/e</i>): 394,4 (M+1)
		
272	N-(3-(4-(4-fluor-2-metyl-1H-indol-5-yloksy)-pyrimidin-2-ylamino)benzyl)-metansulfonamid	MS (<i>m/e</i>): 442,4 (M+1)
		
273	3-(4-(4-fluor-2-metyl-1H-indol-5-yloksy)-pyrimidin-2-ylamino)-N-(2-hidroksyetyl)-benzamid	MS (<i>m/e</i>): 422,1 (M+1)
		
274	3-(4-(4-fluor-2-metyl-1H-indol-5-yloksy)-pyrimidin-2-ylamino)-N-(2-(metylamino)-2-oksoetyl)benzamid	MS (<i>m/e</i>): 449,5 (M+1)
		
275	3-(4-(4-fluor-2-metyl-1H-indol-5-yloksy)-pyrimidin-2-ylamino)-N-(2-morfolinoetyl)-benzamid	MS (<i>m/e</i>): 491,1 (M+1)
		
276	N-(3-(4-(4-fluor-2-metyl-1H-indol-5-yloksy)-pyrimidin-2-ylamino)fenyl)metansulfonamid	MS (<i>m/e</i>): 428,1 (M+1)
		

277	3-(4-(4-fluor-2-metyl-1H-indol-5-yloksy)-pyrimidin-2-ylamino)-N-(2-(piperidin-1-yl)-etyl)benzamid	MS (<i>m/e</i>): 489,1 (M+1)
		
278	3-(3-(4-(4-fluor-2-metyl-1H-indol-5-yloksy)-pyrimidin-2-ylamino)fenyl)-N-metylpropanamid	MS (<i>m/e</i>): 420,2 (M+1)
		
279	3-(4-(4-fluor-2-metyl-1H-indol-5-yloksy)-pyrimidin-2-ylamino)-N-(2-metoksyetyl)-benzamid	MS (<i>m/e</i>): 436,1 (M+1)
		
280	N-(4-(4-(4-fluor-2-metyl-1H-indol-5-yloksy)-pyrimidin-2-ylamino)fenyl)metansulfonamid	MS (<i>m/e</i>): 428,1 (M+1)
		
281	2-(3-(4-(4-fluor-2-metyl-1H-indol-5-yloksy)-pyrimidin-2-ylamino)fenyl)-N-(2-morfolinoetyl)acetamid	MS (<i>m/e</i>): 505,1 (M+1)
		
282	4-(4-fluor-2-metyl-1H-indol-5-yloksy)-N-(3-(2-(metylsulfonyl)etoksy)fenyl)pyrimidin-2-amin	MS (<i>m/e</i>): 457,2 (M+1)
		

283	4-(4-fluor-2-metyl-1H-indol-5-yloksy)-N-(6-metoksy-pyridin-3-yl)pyrimidin-2-amin	MS (<i>m/e</i>): 366,4 (M+1)
-----	--	--------------------------------



Eksempel 284: Syntese av 3-(4-(2-metyl-1H-indol-5-ylamino)pyrimidin-2-ylamino)fenol (forbindelse 284):



5

[0041] En oppløsning av N2-(3-metoksylfenyl)-N4-(2-metyl-1H-indol-5-yl)pyrimidin-2,4-diamin (0,1 mmol) i 5ml CH₂Cl₂ ble plassert i et isbad. Til dette tilsatte man BBr₃ (0,5 mmol). Reaksjonsblandingen ble omrørt over natten ved romtemperatur og deretter helt i isvann og ekstrahert med etylacetat. Det organiske sjikt ble vasket sekvensielt med vann og saltvann, tørket over vannfritt Na₂SO₄ og inndampet. Residuet ble rensert ved

10 kolonnekromatografi for å gi det ønskede produkt i et utbytte på 83%.

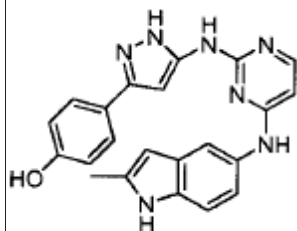
[0042] ¹H NMR (DMSO-*d*₆, 400 M Hz): δ 10,501 (s, 1H), 9,115 (s, 1H), 8,956 (s, 1H), 8,868 (s, 1H), 7,908 (d, *J*=6 Hz, 1H), 7,716 (s, 1H), 7,271 (d, *J*=8 Hz, 1H), 7,210 (d, *J*=8,4 Hz, 1H), 7,114 (d, *J*=8 Hz, 1H), 6,968 (t, *J*=8 Hz, 1H), 6,322 (dd, *J*=8,1,6 Hz, 1H), 6,097 (m, 2H),

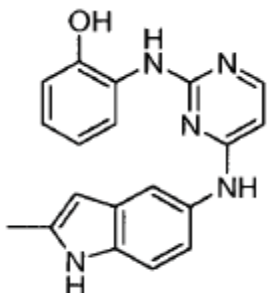
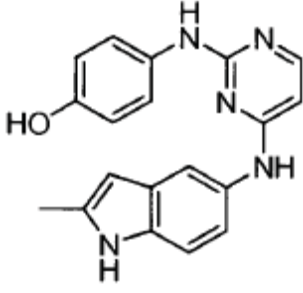
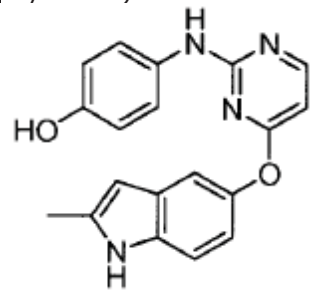
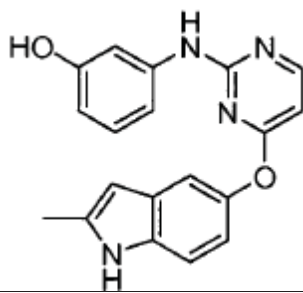
15 2,377 (s, 3H); MS (*m/e*): 331,4 (M+1).

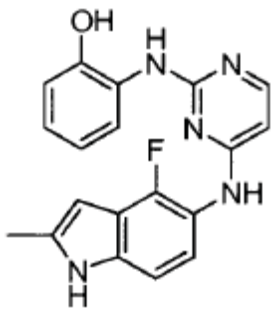
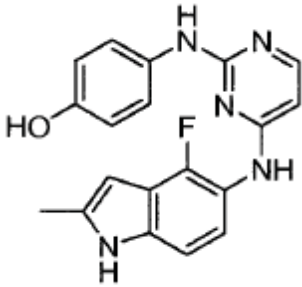
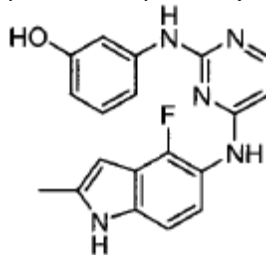
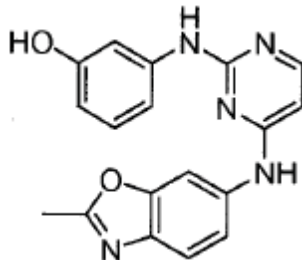
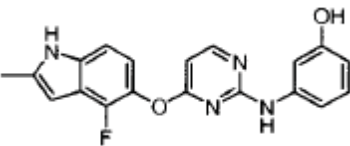
Eksempelene 285-295: Syntese av forbindelsene 285-295

[0043] Hver av forbindelsene 285-295 ble syntetisert på lignende måte som hva som ble beskrevet i eksempel 284.

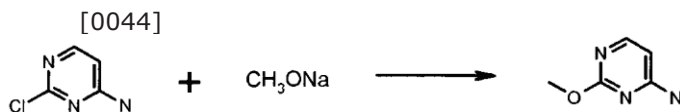
Forbindelse	Navn	¹ H NMR (CD ₃ OD, 400 M Hz)/MS
285	4-(5-(4-(2-metyl-1H-indol-5-ylamino)-pyrimidin-2-ylamino)-1H-pyrazol-3-yl)fenol	7,863 (d, <i>J</i> =6,0 Hz, 1H), 7,286 (d, <i>J</i> =8,8 Hz, 1H), 6,830 (br, 2H), 6,125-6,080 (m, 4H), 5,558-5,527 (m, 2H), 2,415 (s, 3H); MS(<i>m/e</i>): 411,8 (M+1).



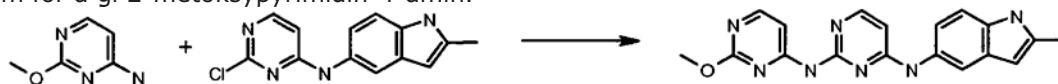
286	2-(4-(2-metyl-1H-indol-5-ylamino)pyrimidin-2-ylamino)fenol 	7,791 (d, $J=6,0$ Hz, 2H), 7,584 (s, 1H), 7,047 (d, $J=8,8$ Hz, 1H), 7,063 (d, $J=7,6$ Hz, 1H), 6,974 (t, $J=7,6$ Hz, 1H), 6,882 (d, $J=8,0$ Hz, 1H), 6,794 (t, $J=8,0$ Hz, 1H), 6,164 (d, $J=6,0$ Hz, 1H), 6,124 (s, 1H), 2,027 (s, 3H); MS(m/e): 332,2 (M+1).
287	4-(4-(2-metyl-1H-indol-5-ylamino)pyrimidin-2-ylamino)fenol 	10,573 (s, 1H), 9,162 (s, 1H), 9,007 (s, 1H), 8,985 (s, 1H), 7,952 (d, $J=5,6$ Hz, 1H), 7,766 (s, 1H), 7,301 (d, $J=8$ Hz, 1H), 7,262 (d, $J=8$ Hz, 1H), 7,123 (d, $J=8$ Hz, 1H), 7,011 (m, 1H), 6,332 (dd, $J=8,1,6$ Hz, 1H), 6,103 (m, 2H), 2,391 (s, 3H); MS(m/e): 331,4 (M+1)
289	4-(4-(2-metyl-1H-indol-5-yloksy)pyrimidin-2-ylamino)fenol 	8,133 (d, $J=6,0$ Hz, 1H), 7,324 (d, $J=8,4$ Hz, 1H), 7,225-7,183 (m, 3H), 6,819 (dd, $J=8,8$ Hz, $J=2,4$ Hz, 1H), 6,533 (s, 1H), 6,530 (s, 1H), 6,213 (d, $J=5,6$ Hz, 1H), 6,172 (s, 1H), 2,428 (s, 3H); MS(m/e): 374,3 (M+1).
290	3-(4-(2-metyl-1H-indol-5-yloksy)pyrimidin-2-ylamino)fenol 	8,179 (d, $J=6,0$ Hz, 1H), 7,333 (d, $J=8,8$ Hz, 1H), 7,193 (s, 1H), 7,095 (s, 1H), 6,953 (d, $J=7,2$ Hz, 1H), 6,902 (t, $J=8,0$ Hz, 1H), 6,831 (d, $J=8,8$ Hz, 1H), 6,387 (d, $J=7,6$ Hz, 1H), 6,244 (d, $J=6,0$ Hz, 1H), 6,171 (s, 1H), 3,332 (s, 3H), 2,454 (s, 3H); MS(m/e): 333,2 (M+1).

291	2-(4-(4-fluor-2-metyl-1H-indol-5-ylamino)-pyrimidin-2-ylamino)fenol 	11,249 (s, 1H), 8,943 (d, $J=4,8$ Hz, 1H), 7,920 (d, $J=5,6$ Hz, 1H), 7,867 (m, $J=6,4$ Hz, 2H), 7,128 (d, $J=8,0$ Hz, 1H), 7,078 (t, $J=8,4-6,8$ Hz, 1H), 6,797 (s, 2H), 6,589 (s, 1H), 6,217 (s, 1H), 6,075 (s, 1H), 4,061 (m, $J=7,2-6,8$ Hz, 1H), 2,406 (s, 3H); MS: 350,2 (M+1).
292	4-(4-(4-fluor-2-metyl-1H-indol-5-ylamino)-pyrimidin-2-ylamino)fenol 	11,212 (s, 1H), 8,845 (s, 1H), 8,689 (d, $J=10,0$ Hz, 1H), 7,868 (d, $J=5,6$ Hz, 2H), 7,427 (d, $J=8,4$ Hz, 2H), 7,107 (t, $J=8,4-6,4$ Hz, 1H), 6,509 (d, $J=8,0$ Hz, 2H), 6,208 (s, 1H), 5,940 (m, $J=3,6-1,6$ Hz, 1H), 4,060 (m, $J=7,2-6,8$ Hz, 1H), 2,408 (s, 3H); MS(m/e): 350,2 (M+1).
293	3-(4-(4-fluor-2-metyl-1H-indol-5-ylamino)-pyrimidin-2-ylamino)fenol 	11,217 (s, 1H), 9,069 (s, 1H), 8,836 (s, 1H), 8,715 (s, 1H), 7,922 (d, $J=6,0$ Hz, 1H), 7,224 (d, $J=8,4$ Hz, 2H), 7,128 (T, $J=6,4-2,4$ Hz, 2H), 6,839 (t, $J=8,4-6,4$ Hz, 1H), 6,268 (d, $J=1,6$ Hz, 2H), 6,249 (s, 1H), 6,207 (s, 1H), 4,043 (m, $J=7,2-6,8$ Hz, 1H), 2,400 (s, 3H); MS(m/e): 350,2 (M+1).
294	3-(4-(4-metylbenzo[d]oksazol-6-ylamino)-pyrimidin-2-ylamino)fenol 	9,500 (s, 1H), 9,175 (s, 1H), 9,054 (s, 1H), 8,164 (s, 1H), 8,003 (d, $J=6,0$ Hz, 1H), 7,569 (m, 2H), 7,230 (m, 2H), 6,996 (dd, 1H), 6,338 (d, $J=8,0$ Hz, 1H), 7,239 (d, $J=6,0$ Hz, 1H), 2,607 (s, 3H), MS(m/e): 334,2 (M+1).
295	3-(4-(4-fluor-2-metyl-1H-indol-5-yloksy)-pyrimidin-2-ylamino)fenol 	MS (m/e): 351,4 (M+1)

Eksempel 296: Syntese av N-(2-metoksyppirimidin-4-yl)-N-(2-metyl-1H-indol-5-yl)pyrimidin-2,4-diamin (forbindelse 296):



- 5 **[0045]** Oppløsningen av 2-klorpyrimidin-4-amin (1 mmol) og natriummetoksid (1,5 mmol) i 10 ml metanol ble tilbakesløyssbehandlet i 2h, og etter fjerning av løsemidlet, ble residuet løst opp i CH₂Cl₂ og vasket med vann, tørket over vannfritt NaSO₄ og inndampet under vakuum for å gi 2-metoksyppirimidin-4-amin.



Forbindelse 296

- 10 **[0046]** Til en oppløsning av 2-metoksyppirimidin-4-amin (0,1 mmol) og N-(2-klorpyrimidin-4-yl)-2-metyl-1H-indol-5-amin (0,1 mmol) i 3 ml dioksid, tilsatte man CsCO₃ (0,2 mmol), Pd(OAc)₂ (10 mmol%) og Xantphos (10 mmol%). Blandingen ble omrørt under mikrobølgestråling ved 200°C i 40 minutter. Etter avkjøling, ble oppløsningen filtrert, filtratet ble inndampet under vakuum, og residuet ble rensert ved kolonnekromatografi (C-18) for å gi N-(2-metoksyppirimidin-4-yl)-N-(2-metyl-1H-indol-5-yl)pyrimidin-2,4-diamin (utbytte 48%).

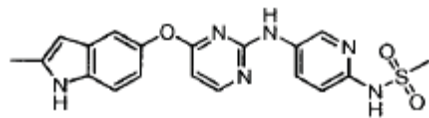
15 **[0047]** ¹H NMR(DMSO-d₆, 400M Hz): 10,839 (s, 1 H), 9,718 (s, 1 H), 9,281 (s, 1 H), 8,162 (d, J=6,0 Hz, 1H), 8,032 (m, 2H), 7,693 (s, 1H), 7,251 (d, J=8,8 Hz, 1H), 7,099 (d, J=7,2 Hz, 1H), 6,300 (d, J=6,0 Hz, 1H), 6,107 (s, 1H), 3,863 (s, 3H), 2,383 (s, 3H); MS (m/e): 348,2 (M+1)

20 **Eksemplene 297-299: Syntese av forbindelsene 297-299**

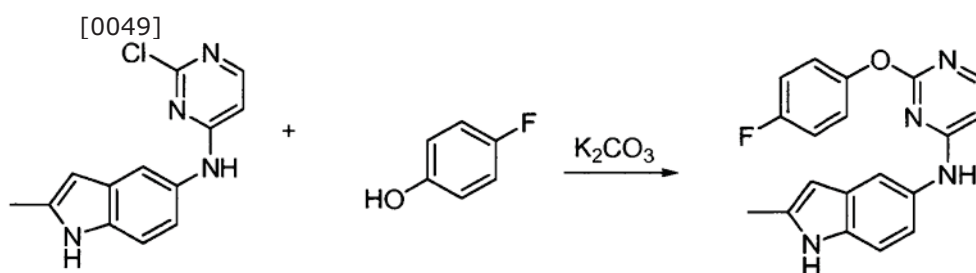
[0048] Hver av forbindelsene 297-299 ble syntetisert på lignende måte som hva som ble beskrevet i eksempel 296.

Forbindelse	Navn	¹ H NMR (DMSO-d ₆ , 400 M Hz)/MS
297	N-(2-metoksyppiridin-4-yl)-N-(2-metyl-1H-indol-5-yl)pyrimidin-2,4-diamin 	10,837 (s, 1 H), 9,421 (s, 1 H), 9,144 (s, 1 H), 7,978 (d, J=6,0 Hz, 1H), 7,838 (d, J=6,0 Hz, 1H), 7,606 (s, 1H), 7,333-7,303 (m, 2H), 7,249 (d, J=8,4 Hz, 1H), 7,084 (d, J=8,0 Hz, 1H), 6,205 (d, J=5,6 Hz, 1H), 6,088 (s, 1H), 3,775 (s, 3H), 2,382 (s, 3H); MS (m/e): 347,2 (M+1)
298	N-(2-metoksyppiridin-4-yl)-N-(2-metyl-1H-indol-5-yl)pyrimidin-2,4-diamin 	11,258 (s, 1 H), 10,400 (br, 1 H), 9,036 (s, 1 H), 8,829 (s, 1 H), 8,509 (s, 1 H), 8,048 (d, J=8,4 Hz, 1H), 7,911 (d, J=5,6 Hz, 1H), 7,007-7,122 (m, 2H), 6,743 (dd, J=8,4 Hz, 1,6 Hz, 1H), 6,194 (s, 1H), 6,012 (br,1H), 3,166 (s, 3H), 2,397 (s, 3H); MS (m/e): 428,1 (M+1)

299	N-(5-(4-(2-metyl-1H-indol-5-yloksy)-pyrimidin-2-ylamino)pyridin-2-yl)-metansulfonamid	MS (<i>m/e</i>): 411,4 (M+1)
-----	---	--------------------------------



Eksempel 300: Syntese av N-(2-(4-fluorfenoksy)pyrimidin-4-yl)-2-metyl-1H-indol-5-amin (forbindelse 300)



Forbindelse 300

5

[0050] N-(2-klorpyrimidin-4-yl)-2-metyl-1H-indol-5-amin (0,1 mmol) og p-fluorfenol (0,1 mmol) ble løst opp i 0,5 ml DMF. Til dette tilsatte man K_2CO_3 (0,2 mmol). Etter omrøring ved 60°C i 5 h, ble reaksjonsblandingen fortynnet med vann og ekstrahert med etylacetat. Det organiske sjikt ble vasket sekvensielt med vann og saltvann, tørket med vannfritt Na_2SO_4 og inndampet. Det dannede oljeaktige residuum ble renset ved kolonnekromatografi for å gi forbindelse 300 i et utbytte på 76%.

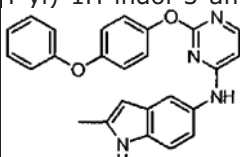
10

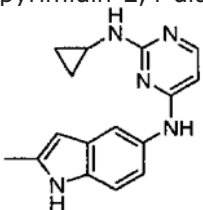
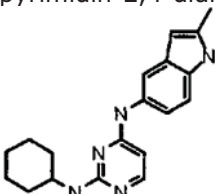
[0051] 1H NMR (DMSO- d_6 , 400 MHz): δ 10,802 (s, 1H), 9,491 (s, 1H), 7,990 (d, $J=5,4$ Hz, 1H), 7,495 (s, 1H), 7,295 (m, $J=8,4-3,6$ Hz, 4H), 7,236 (d, $J=5,4$ Hz, 1H), 7,133 (d, $J=5,6$ Hz, 1H), 6,486 (d, $J=5,6$ Hz, 1H), 5,902 (s, 1H), 2,402 (s, 3H); MS (*m/e*): 335,1 (M+1).

15

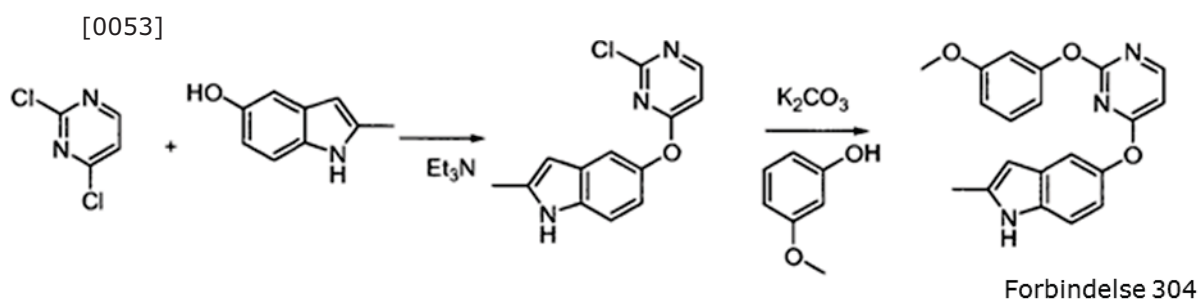
Eksemplene 301-303: Syntese av forbindelsene 301-303

[0052] Forbindelsene 301-303 ble fremstilt på lignende måte som hva som ble beskrevet i eksempel 300.

Forbindelse	Navn	1H NMR (CD_3OD , 400 M Hz)/MS
301	2-metyl-N-(2-(4-fenoksyfenoksy)pyrimidin-4-yl)-1H-indol-5-amin 	11,190 (s, 1H), 9,046 (s, 1H), 7,959 (s, 1H), 7,931 (d, $J=6,0$ Hz, 1H), 7,681 (d, $J=7,2$ Hz, 2H), 7,361 (t, $J=8,0-7,6$ Hz, 2H), 7,114 (m, $J=8,4-7,2$ Hz, 3H), 6,903 (d, $J=8,0$ Hz, 2H), 6,755 (d, $J=7,2$ Hz, 2H), 6,179 (s, 1H), 6,024 (s, 1H), 2,338 (s, 3H); MS(<i>m/ e</i>): 409,2 (M+1)

302	N2-cyklopropyl-N4-(2-metyl-1H-indol-5-yl)-pyrimidin-2,4-diamin 	7,739 (d, $J=6,4$ Hz, 1H), 7,593 (s, 1H), 7,252 (d, $J=7,6$ Hz, 1H), 7,119 (d, $J=8,0$ Hz, 1H), 6,009 (s, 1H), 6,016 (d, $J=6,0$ Hz, 1H), 2,425 (s, 3H), 0,784 (m, $J=5,2-2,4$, 2H), 0,626 (m, $J=2,0-0,8$ Hz, 3H), 0,547 (m, $J=2,0-1,2$ Hz, 3H), MS(m/e): 280,2 (M+1)
303	N2-cykloheksyl-N4-(2-metyl-1H-indol-5-yl)-pyrimidin-2,4-diamin 	MS (m/e): 322,3 (M+1)

Eksempel 304: Syntese av 5-(2-(3-metoksyfenoksy)pyrimidin-4-yloksy)-2-metyl-1H-indol (forbindelse 304):



5

[0054] Til en oppløsning av 2,4-diklorpyrimidin (1 mmol) og 5-hydroksy-2-metylinol (1 mmol) i 5ml EtOH tilsatte man Et₃N (1 mmol). Reaksjonsblandingen ble tilbakeløpsbehandlet i 5 h. Etter fjerning av løsemidlet under vakuum og tilsetning av H₂O, ble blandingen ekstrahert med EtOAc. De organiske sjikt ble slått sammen, vasket med en mettet vandig NaCl-oppløsning, tørket over vannfritt Na₂SO₄ og inndampet under vakuum. Det dannede oljeaktige residuum ble rensset ved kolonnekromatografi for å gi 5-(2-klorpyrimidin-4-yloksy)-2-metyl-1H-indol i et utbytte på 75%.

10

[0055] 5-(2-Klorpyrimidin-4-yloksy)-2-metyl-1H-indol (0,1 mmol) og m-metoksyfenol (0,1 mmol) ble løst opp i 0,5 ml DMF. K₂CO₃ (0,2 mmol) ble deretter tilsatt. Etter omrøring av reaksjonsblandingen ved 60°C i 5 h, ble den fortynnet med vann og ekstrahert med etylacetat. Det organiske sjikt ble vasket sekvensielt med vann og saltvann, tørket over vannfritt Na₂SO₄ og inndampet. Det urensede produkt ble rensset ved kolonnekromatografi for å gi forbindelse 304 i et utbytte på 76%.

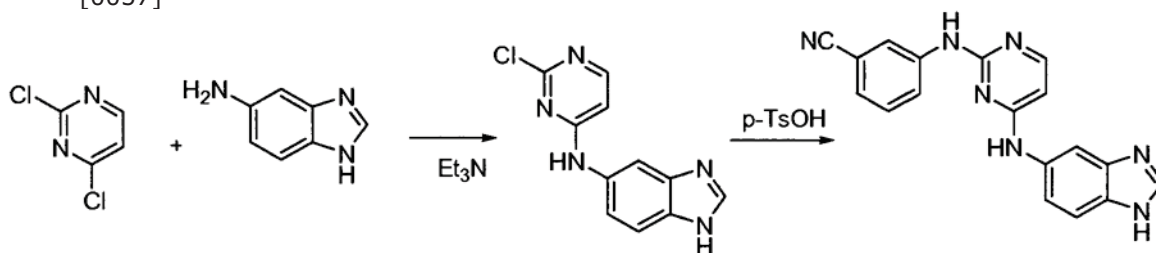
15

[0056] ¹H NMR (CD₃OD, 400 M Hz): δ 8,303 (d, $J=5,6$ Hz, 1H), 8,084 (s, 1H), 7,305-7,262 (m, 3H), 6,908 (dd, $J=8,8$ Hz, $J=2,4$ Hz, 1H), 6,816-6,764 (m, 3H), 6,463 (d, $J=5,6$ Hz, 1H), 6,226 (s, 1H), 3,780 (s, 3H), 2,465 (s, 3H); MS (m/e): 346,5 (M-1).

20

Eksempel 305: Syntese av 3-(4-(2-metyl-1H-indol-5-ylamino)pyrimidin-2-ylamino)benzonitril (forbindelse 305)

[0057]



Forbindelse 305

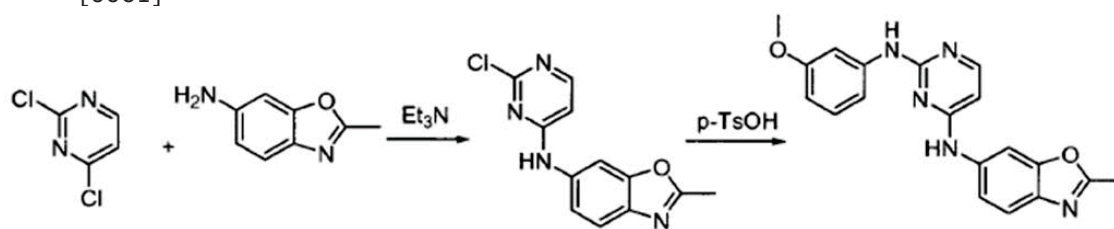
5 **[0058]** Til en oppløsning av 2,4-diklorpyrimidin (1 mmol) og 5-aminobenzimidazol (1 mmol) i 5ml EtOH tilsatte man Et₃N (1 mmol). Reaksjonsblandingen ble tilbakeløpsbehandlet i 5 timer. Etter fjerning av løsemidlet under vakuum og tilsetning av H₂O, ble blandingen ekstrahert med EtOAc. De organiske sjikt ble slått sammen, vasket med en mettet vandig NaCl-oppløsning, tørket over vannfritt Na₂SO₄ og inndampet under vakuum. Residuet ble rensed ved
10 kolonnekromatografi for å gi N-(2-klorpyrimidin-4-yl)-1H-benzo[d]imidazol-5-amin i et utbytte på 80%.

[0059] N-(2-Klorpyrimidin-4-yl)-1H-benzo[d]imidazol-5-amin (0,1 mmol), 3-aminobenzonitril (0,1 mmol) og p-TsOH-monohydrat (0,2 mmol) ble løst opp i 0,5 ml DMF. Etter omrøring av reaksjonsblandingen ved 60°C i 5 h, ble den fortynnet med vann og
15 ekstrahert med etylacetat. Det organiske sjikt ble vasket sekvensielt med vann og saltvann, tørket over vannfritt Na₂SO₄ og inndampet. Den dannede olje ble rensed ved kolonnekromatografi for å gi forbindelse 305 i et utbytte på 76%.

[0060] ¹H NMR (CD₃OD, 400 M Hz): δ 8,178 (s, 1H), 7,942 (d, J=6,4 Hz, 2H), 7,825 (br, 1H), 7,633-7,603 (m, 2H), 7,469 (dd, J=8,8 Hz, 5 Hz, 1H), 7,212 (t, J=8,4 Hz, 1H), 7,075
20 (d, J=8,0 Hz, 1H), 6,254 (d, J=6,0 Hz, 1H), 3,345 (s, 1H); MS: 327,2 (M+1).

Eksempel 306: Syntese av N2-(3-metoksyfenyl)-N4-(2-metylbenzo[d]oksazol-6-yl)pyrimidin-2,4-diamin (forbindelse 306)

[0061]



Forbindelse 306

25 **[0062]** Til en oppløsning av 2,4-diklorpyrimidin (1 mmol) og 2-metyl-1,3-benzoksazol-5-amin (1 mmol) i 5ml EtOH tilsatte man Et₃N (1 mmol). Reaksjonsblandingen ble tilbakeløpsbehandlet i 5 h. Etter fjerning av løsemidlet under vakuum og tilsetning av H₂O, ble blandingen ekstrahert med EtOAc. De organiske sjikt ble slått sammen, vasket med en mettet vandig NaCl-oppløsning, tørket over vannfritt Na₂SO₄ og inndampet under vakuum. Residuet ble
30 rensed ved kolonnekromatografi for å gi N-(2-klorpyrimidin-4-yl)-2-metylbenzo[d]oksazol-6-amin i et utbytte på 73%.

[0063] N-(2-Klorpyrimidin-4-yl)-2-metylbenzo[d]oksazol-6-amin (0,1 mmol), 3-metoksyanilin (0,1 mmol) og p-TsOH-monohydrat (0,2 mmol) ble løst opp i 0,5ml DMF. Etter omrøring av reaksjonsblandingen ved 60°C i 5 h, ble den fortynnet med vann og ekstrahert med etylacetat. Det organiske sjikt ble vasket sekvensielt med vann og saltvann, tørket over vannfritt Na₂SO₄ og inndampet. Det dannede oljeaktige residuum ble rensed ved kolonnekromatografi for å gi forbindelse 306 i et utbytte på 82%.

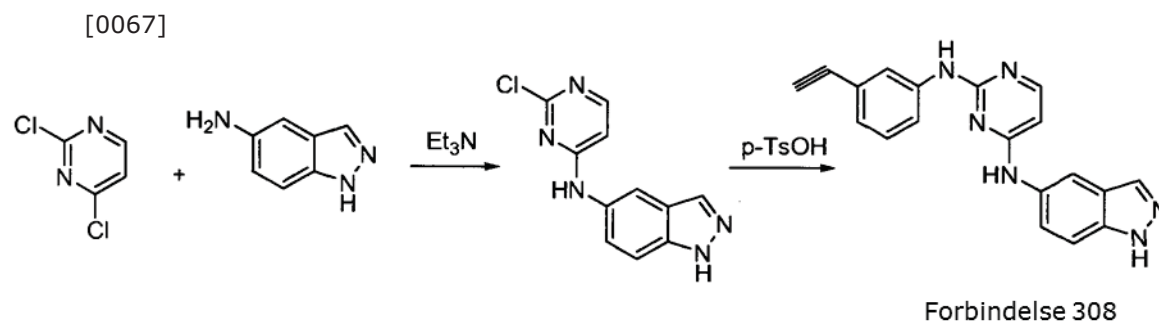
[0064] ¹H NMR (DMSO-d₆, 400 M Hz): δ 9,431 (s, 1H), 9,158 (s, 1H), 8,136 (s, 1H), 8,022 (d, J=5,6 Hz, 1H), 7,566 (d, J=8,8 Hz, 1H), 7,517 (d, J=8,8 Hz, 1H), 7,418 (s, 1H), 7,367 (d, J=8,0 Hz, 1H), 7,126 (t, J=8,4 Hz, 1 H), 6,490 (m, 1H), 6,224 (d, J=5,2 Hz, 1H), 3,674 (s, 3H), 2,609 (s, 3H); MS(m/e): 348,3 (M+1).

Eksempel 307: Syntese av N2-(3-etynylfenyl)-N4-(2-metylbenzo[d]oksazol-6-yl)pyrimidin-2,4-diamin (forbindelse 307).

[0065] Forbindelse 307 ble syntetisert på lignende måte som hva som ble beskrevet i eksempel 306.

[0066] ¹H NMR (DMSO-d₆, 400 M Hz): δ 9,566 (d, J=5,2 Hz, 1H), 9,309 (s, 1H), 8,099 (s, 1H), 8,038 (d, J=6,0 Hz, 1H), 7,917 (s, 1H), 7,805 (d, J=8,4 Hz, 1H), 7,574 (m, 2H), 7,231 (m, 1H), 6,996 (d, J=7,6 Hz, 1H), 7,278 (d, J=5,6 Hz, 1H), 4,059 (s, 1H), 2,608 (s, 3H); MS(m/e): 342,2 (M+1).

Eksempel 308: Syntese av N2-(3-etynylfenyl)-N4-(1H-indazol-6-yl)pyrimidin-2,4-diamin (forbindelse 308)



[0068] Til en oppløsning av 2,4-diklorpyrimidin (1 mmol) og 5-aminoindazol (1 mmol) oppløst i 5 ml EtOH tilsatte man Et₃N (1 mmol). Reaksjonsblandingen ble tilbakeløpsbehandlet i 5 h. Etter fjerning av løsemidlet under vakuum og tilsetning av H₂O, ble blandingen ekstrahert med EtOAc. De organiske sjikt ble slått sammen, vasket med en mettend vandig NaCl-oppløsning, tørket over vannfritt Na₂SO₄ og inndampet under vakuum. Den dannede olje ble rensed ved kolonnekromatografi for å gi N-(2-klorpyrimidin-4-yl)-1H-indazol-5-amin i et utbytte på 80%.

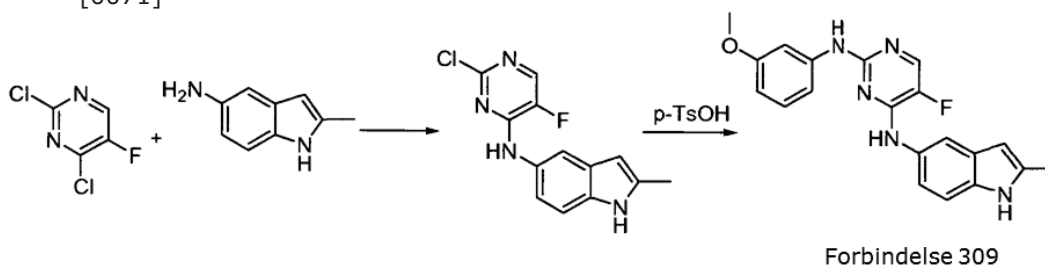
[0069] N-(2-Klorpyrimidin-4-yl)-1H-indazol-5-amin (0,1 mmol), 3-etynylanilin (0,1 mmol) og p-TsOH (0,2 mmol, monohydrat) ble løst opp i 0,5 ml DMF. Etter omrøring av reaksjonsblandingen ved 60°C i 5 h, ble den fortynnet med vann og ekstrahert med etylacetat. Det organiske sjikt ble vasket sekvensielt med vann og saltvann, tørket over vannfritt Na₂SO₄ og inndampet. Residuet ble rensed ved kolonnekromatografi for å gi forbindelse 308 i et utbytte på 74%.

[0070] ¹H NMR (DMSO-d₆, 400 M Hz): δ 12,966 (brs, 1H), 9,344 (brs, 1H), 9,234 (brs, 1H), 8,145 (s, 1H), 8,005 (m, 2H), 7,893 (s, 1H), 7,795 (d, 1H), 7,527 (d, J=8,8 Hz, 1H),

7,471 (d, $J=8,8$ Hz, 1H), 7,212 (t, 1H), 7,021 (d, 1H), 6,626 (d, 1H), 4,037 (s, 1H); MS (m/e): 327,2 ($M+1$).

Eksempel 309: Syntese av N2-(3-metoksyfenyl)-N4-(2-metyl-1H-indol-5-yl)-pyrimidin-2,4-diamin (forbindelse 309)

5 [0071]



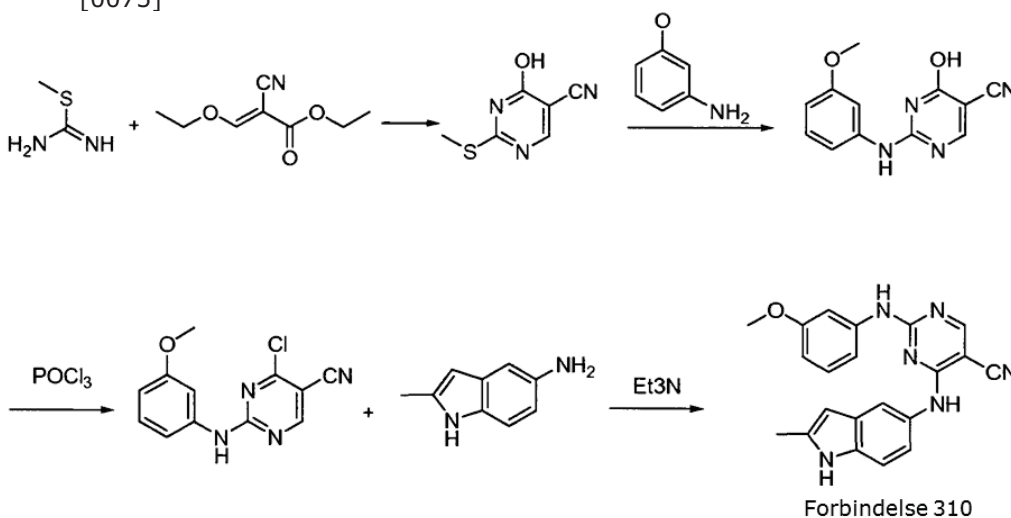
10 **[0072]** 2,4-Diklor-5-fluorpyrimidin (1 mmol) og 5-amino-2-metylindol (1,5 mmol) ble løst opp i 3 ml CH_3OH og 9 ml H_2O . Etter omrøring av reaksjonsblandingen ved romtemperatur i 1h, ble den fortynnet med H_2O , surgjort med 2N HCl og lydbehandlet. Reaksjonsblandingen ble deretter filtrert, vasket med H_2O og tørket for å gi N-(2-klor-5-fluorpyrimidin-4-yl)-2-metyl-1H-indol-5-amin i et utbytte på 78%.

15 **[0073]** N-(2-klor-5-fluorpyrimidin-4-yl)-2-metyl-1H-indol-5-amin (0,1 mmol), m-metoksyanilin (0,1mmol) og *p*-TsOH-monohydrat (0,2 mmol) ble løst opp i 0,5 ml DMF. Etter omrøring av reaksjonsblandingen ved 60°C i 5 h, ble den fortynnet med vann og ekstrahert med etylacetat. Det organiske sjikt ble vasket sekvensielt med vann og saltvann, tørket over vannfritt Na_2SO_4 og inndampet. Residuet ble renset ved kolonnekromatografi for å gi forbindelse 309 i et utbytte på 60%.

20 **[0074]** ^1H NMR (CD_3OD , 400 M Hz, δ ppm): 7,854 (d, $J=4,0$ Hz, 1H), 7,703 (d, $J=1,6,1\text{H}$), 7,248 (s, 2H), 7,177 (br, 2H), 7,054 (t, $J=4,2$ Hz, 2H), 6,942 (s, 2H), 3,506 (s, 3H), 2,235 (s, 3H); MS(m/e): 364,2 ($M+1$).

Eksempel 310: Syntese av 2-(3-metoksyfenylamino)-4-(2-metyl-1H-indol-5-ylamino)pyrimidin-5-karbonitril (forbindelse 310)

[0075]



25 **[0076]** 2-Metyl-2-tiopseudourea (5 mmol) og etyletoksymetylcianoacetat (5 mmol) ble løst opp i 20 ml EtOH. Til dette tilsatte man K_2CO_3 , (10 mmol). Etter tilbakeførsbehandling

av blandingen i 48 h, ble den avkjølt til romtemperatur og filtrert. Løsemidlet ble inndampet under vakuum og rensed ved kolonnekromatografi for å gi 4-hydroksy-2-(metyltio)pyrimidin-5-karbonitril i et utbytte på 65%.

[0077] 4-Hydroksy-2-(metyltio)pyrimidin-5-karbonitril (3 mmol) og m-anisidin (3 mmol) i pentan-1-ol ble tilbakeløpsbehandlet i 40 h under nitrogen. Reaksjonsblandingen ble inndampet under vakuum. Residuet ble vasket med vann og tørket for å gi 4-hydroksy-2-(3-metoksyfenylamino)pyrimidin-5-karbonitril.

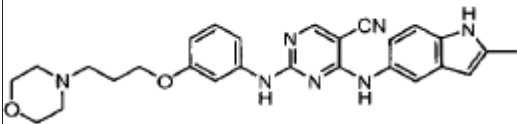
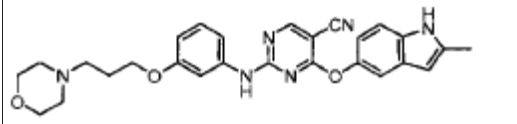
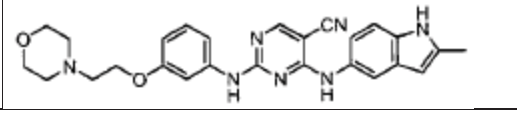
[0078] Til en oppløsning av 4-hydroksy-2-(3-metoksyfenylamino)pyrimidin-5-karbonitril i POCl₃ tilsatte man DMF 0,5 ml. Oppløsningen ble tilbakeløpsbehandlet i 3 h. Reaksjonsblandingen ble avkjølt til romtemperatur og helt i isvann. Oppløsningens pH ble justert til 8-9 med en vandig natriumkarbonatoppløsning, og den ble ekstrahert med diklormetan. De sammenslåtte organiske sjikt ble vasket med saltvann, tørket over vannfritt Na₂SO₄ og inndampet under vakuum for å gi 4-klor-2-(3-metoksyfenylamino)pyrimidin-5-karbonitril.

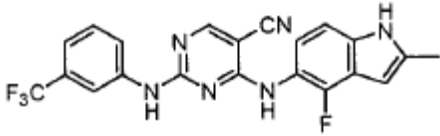
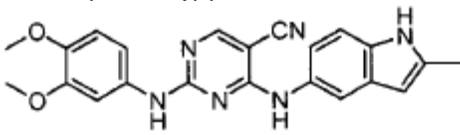
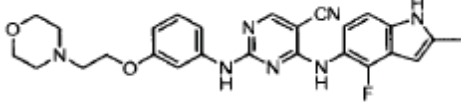
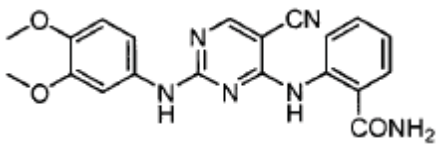
[0079] 4-Klor-2-(3-metoksyfenylamino)pyrimidin-5-karbonitril ble omvandlet til forbindelse 310 på lignende måte som hva som ble beskrevet i eksempel 1.

[0080] ¹H NMR (DMSO-d₆, 400 M Hz): δ 10,925 (s, 1H), 9,710 (d, J=11,2 Hz, 1H), 9,349 (d, J=10,4 Hz, 1H), 8,441 (s, 1H), 7,474 (s, 1H), 7,252 (s, 1H), 7,223 (d, J=6,8 Hz, 1H), 7,187 (s, 1H), 7,062 (m, J= 1H), 6,923 (d, J=2,0 Hz, 1H), 6,485 (t, 1H); 6,098 (s, 1H), 3,453 (s, 3H), 2,387 (s, 3H); MS(m/e): 371,2 (M+1).

Eksemplene 311-317: Syntese av forbindelsene 311-317

[0081] Forbindelsene 311-317 ble fremstilt på lignende måte som hva som ble beskrevet i eksempel 310.

Forbindelse	Navn/struktur	¹ HNMR(DMSO-d ₆ ,400 Hz)/ MS
311	4-(2-metyl-1H-indol-5-ylamino)-2-(3-(3-morfolinopropoksy)fenylamino)pyrimidin-5-karbonitril 	11,184 (s, 1H), 10,745 (s, 1H), 9,492 (s, 1H), 8,396 (s, 1H), 7,322 (s, 1H), 7,292 (d, J=7,2, 1H), 7,147 (m, 1H), 6,919 (m, 1H), 6,815 (d, J=8,8, 1H), 6,416 (d, J=7,2, 1H), 6,261 (t, J=4,8, 1H), 6,129 (s, 1H), 3,447 (m, 2H), 3,547 (m, 4H), 2,398 (s, 3H), 2,337 (m, 6H), 1,747 (m, 2H) .MS (m/e): 484,2 (M+1)
312	4-(2-metyl-1H-indol-5-yloksy)-2-(3-(3-morfolinopropoksy)fenylamino)pyrimidin-5-karbonitril 	MS (m/e): 485,3 (M+1)
313	4-(2-metyl-1H-indol-5-ylamino)-2-(3-(2-morfolinoetoksy)fenylamino)pyrimidin-5-karbonitril 	MS (m/e): 470,5 (M+1)

314	4-(4-fluor-2-metyl-1H-indol-5-ylamino)-2-(3-(trifluormetyl)fenylamino)pyrimidin-5-karbonitril	MS (<i>m/e</i>): 427,2 (M+1)
		
315	2-(3,4-dimetoksyfenylamino)-4-(2-metyl-1H-indol-5-ylamino)pyrimidin-5-karbonitril	MS (<i>m/e</i>): 401,4 (M+1)
		
316	4-(4-fluor-2-metyl-1H-indol-5-ylamino)-2-(3-(2-morfolinoetoksy)fenylamino)pyrimidin-5-karbonitril	MS (<i>m/e</i>): 488,5 (M+1)
		
317	2-(5-cyano-2-(3,4-dimetoksyfenylamino)-pyrimidin-4-ylamino)benzamid	MS (<i>m/e</i>): 391,1 (M+1)
		

Eksempel 318: KDR-kinase-aktivitetsassay ved bruk av kinaseassaysettet Z'-lyte

[0082] Inhiberingen av kinaseaktiviteten av et rekombinant KDR-katalytisk domene (Invitrogen, Carlsbad, CA, U.S.A., Cat. PV3660) ble bestemt ved bruk av "Z'-LYTE™ Tyrl Peptide assay kit" (Invitrogen, Cat. PV3190) i en sort 384 brønners plate (Thermo labsystems, Cambridge, U.K., Cat. 7805). Assayet ble utført i henhold til prosedyrene som anbefales av produsenten.

[0083] Kort sagt fortynnet man en testforbindelse (10 mM stamopløsning i DMSO) til 1:4 med destillert vann som inneholdt 8% DMSO. Oppløsningen ble plassert i en testbrønn og tre kontrollbrønner (C1, C2 og C3) med 2,5 µl/brønn. Kumarin/fluorescein-dobbeltmerket peptidsubstrat ble blandet med KDR-katalytisk domene ("kinase"). 5 µl av kinase/peptid-blandingen ble tilsatt til hver av testbrønner, C1-brønner og C2-brønner, men ikke C3 (endelig konsentrasjon: 0,3 µg/ml kinase, 2 µM peptid). 5 µl fosfor/ThyrI-peptid ble tilsatt til C3-brønner. 2,5 µl 40 µM ATP ble tilsatt til testbrønner og C2-brønner, og 2,5 µl 1,33 x kinasebuffer (1 x buffer: 50 mM HEPES, pH 7,5, 0,01% Brij-35, 5 mM MgCl₂, 5 mM MnCl₂ og 1 mM EGTA) ble tilsatt til C1- og C3-brønner. Platen ble sentrifugert raskt ved 100 rpm for å trekke all oppløsningen ned til bunnen av brønnene, og deretter forseglet og rystet ved 250 rpm og 25°C i 1 time.

[0084] Et utviklingsreagensmiddel ble fortynnet til 1:128 i henhold til produsentens anbefalinger. 5 µl av det fortynnede utviklingsreagensmidlet ble tilsatt til hver brønn. Platen ble sentrifugert ved 1000 rpm for å trekke all oppløsningen ned i brønnene, og deretter forseglet og rystet ved 250 rpm og 25°C i 1 time.

[0085] 5 µl av et stopp-reagensmiddel ble tilsatt til hver brønn. Platen ble sentrifugert ved 1000 rpm for å trekke all oppløsningen ned i brønnene, og deretter forseglet ved 250 rpm og 25°C i 2 minutter. Emisjon av oppløsningen i hver brønn ble målt med en VictorTM3-mikroplateleser ved eksitasjon 400 nm/emisjon 445 nm og 520 nm. Emissionsforholdet og fosforylasjonsprosentdelen ("Phos.") ble beregnet med de følgende ligninger:

$$\text{Emissionsforhold} = \frac{\text{Kumarinemisjon (445 nm)}}{\text{Fluoresceinemisjon (520 nm)}}$$

$$\% \text{ Fosforylasjon} = 1 - \frac{(\text{Emissionsforhold} \times F_{100\%}) - C_{100\%}}{(C_{0\%} - C_{100\%}) + [\text{Emissionsforhold} \times (F_{100\%} - F_{0\%})]}$$

hvor:

10 $C_{100\%}$ = midlere kumarinemisjonssignal av kontrollen med 100% Phos.

$C_{0\%}$ = midlere kumarinemisjonssignal av kontrollen med 0% Phos.

$F_{100\%}$ = midlere fluoresceinemisjonssignal av kontrollen med 100% Phos.

$F_{0\%}$ = midlere fluoresceinemisjonssignal av kontrollen med 0% Phos.

15 Inhiberingsforholdet ble beregnet som følger:

$$\text{Inhibering \%} = \frac{(\text{Phos. i C2-brønn} - \text{Phos. i testbrønn})}{\text{Phos. i C2-brønn}} \times 100\%$$

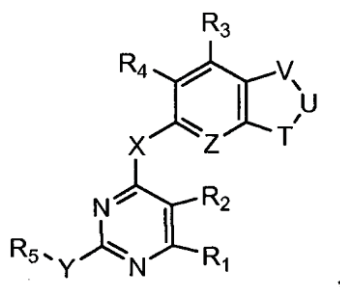
[0086] Resultatene viste at alle de testede forbindelsene hemmet aktiviteten av KDR. IC₅₀-verdiene varierte fra 0,001 til 10 µM.

20 Andre utførelser

[0087] Fra beskrivelsen ovenfor kan en fagperson lett tilegne seg de vesentlige kjennetegn av foreliggende oppfinnelse, og kan gjøre forskjellige forandringer og modifikasjoner av oppfinnelsen for å tilpasse den til diverse bruksområder og betingelser. For eksempel kan det fremstilles og brukes forbindelser som er strukturelt analoge med forbindelsene ifølge foreliggende oppfinnelse.

Patentkrav

1. Forbindelse med den følgende formel:



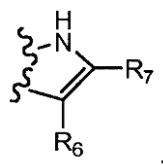
hvor

5 X er O eller NH;

Y er NH;

Z er CR', hvor R' er H, halo, eller alkyl;

V, U, og T sammen representerer



10 R₁, R₃, R₄, og R₆ hver uafhængig er H, halo, nitro, amino, cyano, hydroksy, alkyl, alkenyl, alkynyl, aryl, cykloalkyl, heterocykloalkyl, heteroaryl, alkoksy, alkyltio, alkylkarbonyl, karboksy, alkoksykarbonyl, karbonylamino, sulfonylamino, aminokarbonyl eller aminosulfonyl;

R₂ er H, halo, nitro, amino, hydroksy, alkyl, alkenyl, alkynyl, aryl, cykloalkyl, heterocykloalkyl, heteroaryl, alkoksy, alkyltio, alkylkarbonyl, karboksy, alkoksykarbonyl, karbonylamino, 15 sulfonylamino, aminokarbonyl eller aminosulfonyl;

R₅ er alkyl, cykloalkyl, heterocykloalkyl, aryl eller heteroaryl; og

R₇ er alkyl;

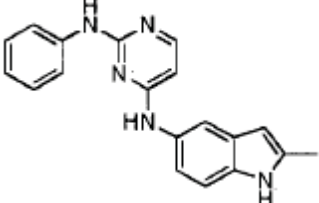
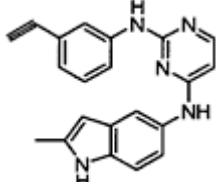
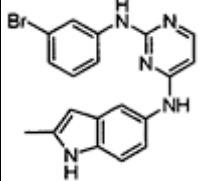
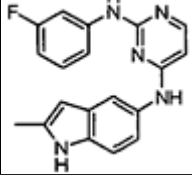
hvor alkylet, cykloalkylet, heterocykloalkylet, arylet, heteroarylet og alkoksyen valgfrit kan være substitueret med mindst én gruppe valgt fra halo, hydroksyl, amino, cyano, nitro, merkaptogruppe, 20 alkoksykarbonyl, amido, karboksy, alkansulfonyl, alkylkarbonyl, karbamido, karbamyl, karboksyl, tioureido, tiocyanato, sulfonamido, alkyl, alkenyl, alkynyl, alkylalkoxy, aryl, heteroaryl, cykloalkyl og heterocykloalkyl, hvor alkylet, alkenylet, alkynylet, alkylalkoxy, arylet, heteroarylet, cykloalkylet og heterocykloalkylet kan være yderligere substitueret;

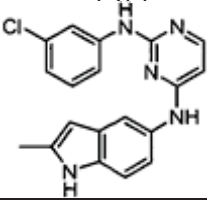
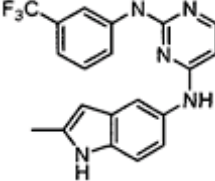
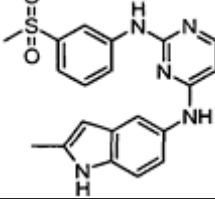
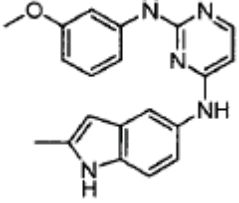
eller et farmasøytisk akseptabelt salt derav.

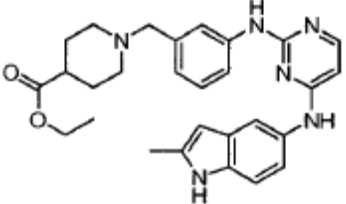
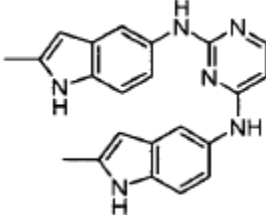
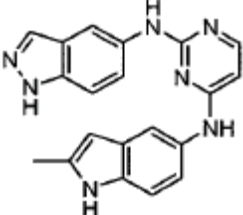
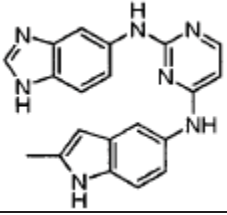
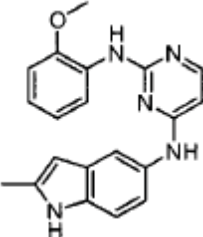
2. Forbindelse eller et farmasøytisk akseptabelt salt derav ifølge et hvilket som helst forutgående krav, hvor R_6 er H og R_7 er metyl.

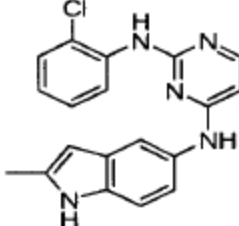
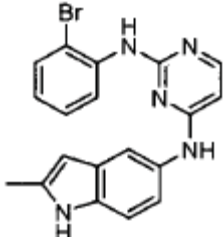
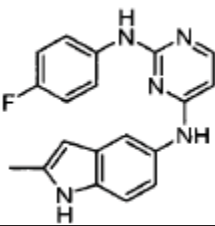
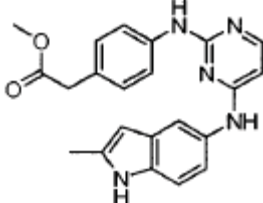
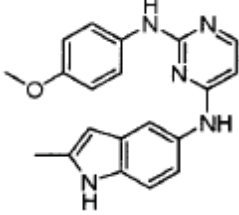
3. Forbindelse eller et farmasøytisk akseptabelt salt derav ifølge et hvilket som helst forutgående krav, hvor R_5 er aryl eller heteroaryl, valgfritt substituert med halo, nitro, amino, cyano, hydroksy, alkyl, alkenyl, alkynyl, aryl, cykloalkyl, heterocykloalkyl, heteroaryl, alkoksy, alkyltio, alkylkarbonyl, karboksy, alkoksykarbonyl, sulfonyl, karbonylamino, sulfonylamino, aminokarbonyl eller aminosulfonyl.

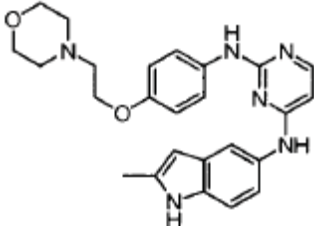
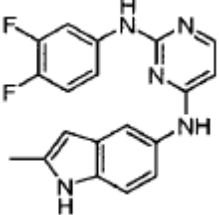
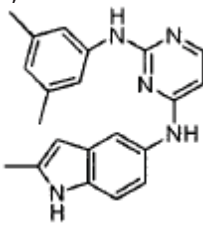
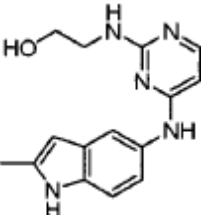
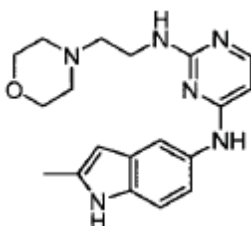
4. Forbindelse eller et farmasøytisk akseptabelt salt derav ifølge krav 1, hvor forbindelsen er en av de følgende forbindelser:

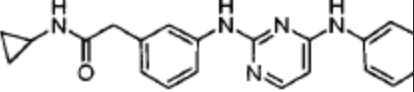
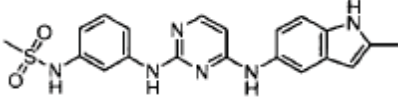
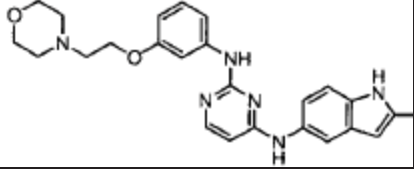
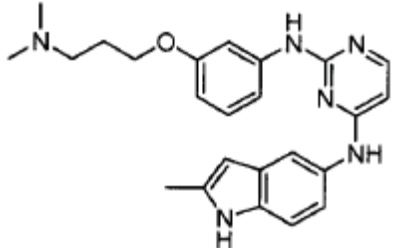
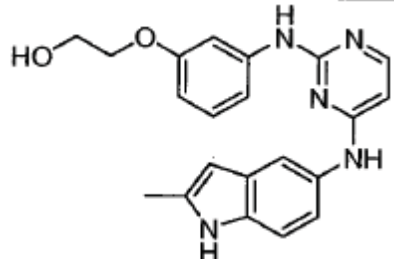
Forbindelse	Navn/struktur
1	N4-(2-metyl-1H-indol-5-yl)-N2-fenylpyrimidin-2,4-diamin 
2	N2-(3-etynylfenyl)-N4-(2-metyl-1H-indol-5-yl)pyrimidin-2,4-diamin 
3	N2-(3-bromfenyl)-N4-(2-metyl-1H-indol-5-yl)pyrimidin-2,4-diamin 
4	N2-(3-fluorfenyl)-N4-(2-metyl-1H-indol-5-yl)pyrimidin-2,4-diamin 

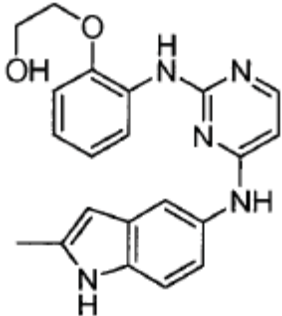
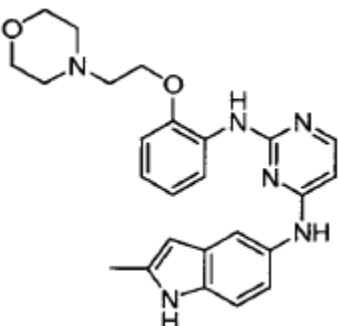
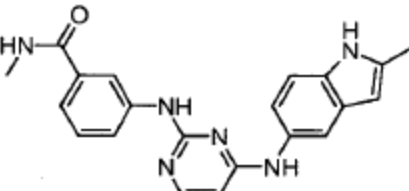
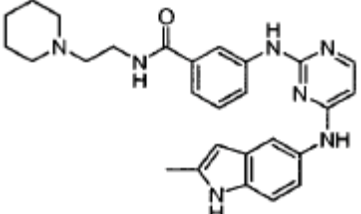
Forbindelse	Navn/struktur
5	N2-(3-klorfenyl)-N4-(2-metyl-1H-indol-5-yl)pyrimidin-2,4-diamin 
6	N4-(2-metyl-1H-indol-5-yl)-N2-(3-(trifluormetyl)fenyl)pyrimidin-2,4-diamin 
7	N4-(2-metyl-1H-indol-5-yl)-N2-(3-(metylsulfonyl)fenyl)pyrimidin-2,4-diamin 
8	N2-(3-metoksyfenyl)-N4-(2-metyl-1H-indol-5-yl)pyrimidin-2,4-diamin 

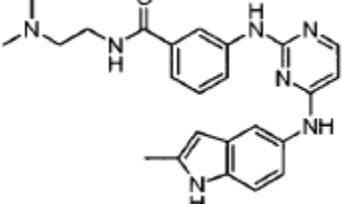
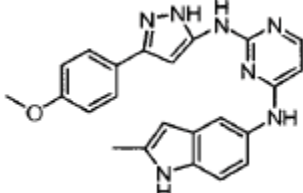
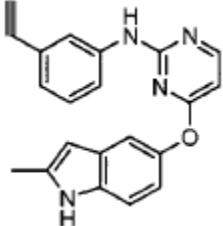
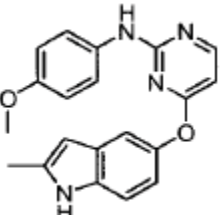
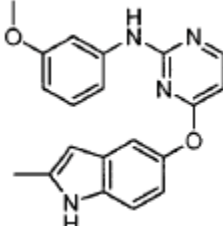
Forbindelse	Navn/struktur
9	etyl-1-(3-(4-(2-metyl-1H-indol-5-ylamino)pyrimidin-2-ylamino)-benzyl)piperidin-4-karboksylat 
10	N2,N4-bis(2-metyl-1H-indol-5-yl)pyrimidin-2,4-diamin 
11	N2-(1H-indazol-5-yl)-N4-(2-metyl-1H-indol-5-yl)pyrimidin-2,4-diamin 
12	N2-(1H-benzo[d]imidazol-5-yl)-N4-(2-metyl-1H-indol-5-yl)-pyrimidin-2,4-diamin 
13	N2-(2-metoksyfenyl)-N4-(2-metyl-1H-indol-5-yl)pyrimidin-2,4-diamin 

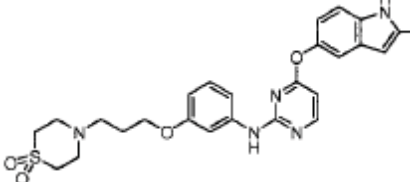
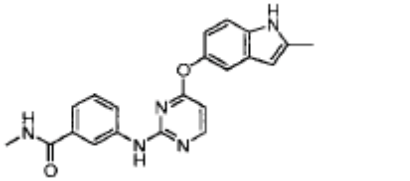
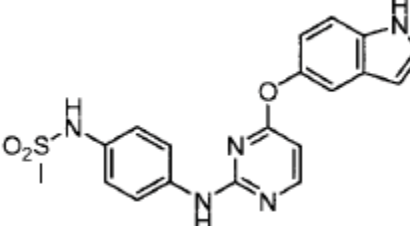
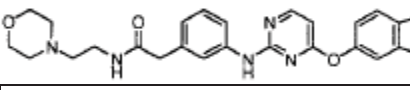
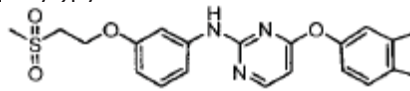
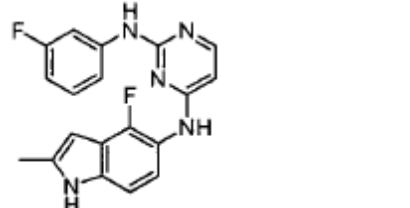
Forbindelse	Navn/struktur
14	N2-(2-klorfenyl)-N4-(2-metyl-1H-indol-5-yl)pyrimidin-2,4-diamin 
15	N2-(2-bromfenyl)-N4-(2-metyl-1H-indol-5-yl)pyrimidin-2,4-diamin 
16	N2-(4-fluorfenyl)-N4-(2-metyl-1H-indol-5-yl)pyrimidin-2,4-diamin 
17	metyl 2-(4-(4-(2-metyl-1H-indol-5-ylamino)pyrimidin-2-ylamino)-fenyl)acetat 
19	N2-(4-metoksyfenyl)-N4-(2-metyl-1H-indol-5-yl)pyrimidin-2,4-diamin 

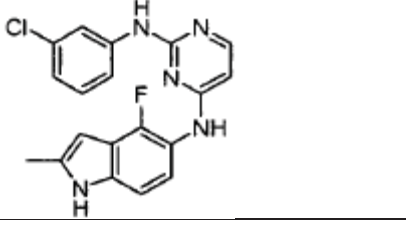
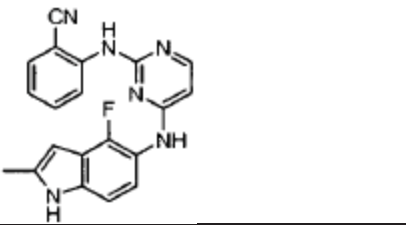
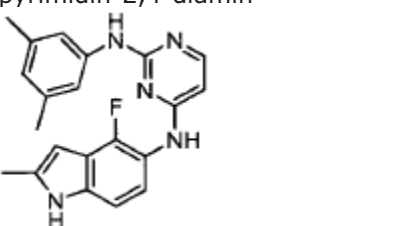
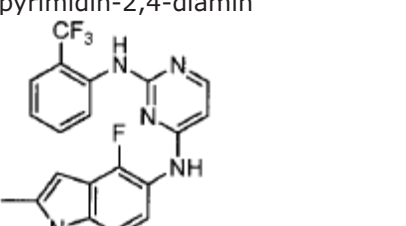
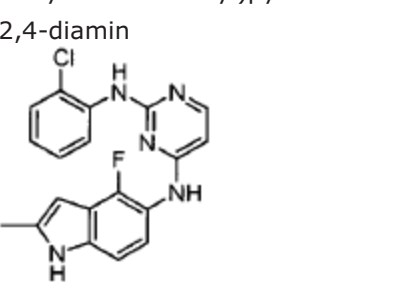
Forbindelse	Navn/struktur
20	N4-(2-metyl-1H-indol-5-yl)-N2-(4-(2-morfolinoetoksy)fenyl)-pyrimidin-2,4-diamin 
21	N2-(3,4-difluorfenyl)-N4-(2-metyl-1H-indol-5-yl)pyrimidin-2,4-diamin 
22	N2-(3,5-dimetylfenyl)-N4-(2-metyl-1H-indol-5-yl)pyrimidin-2,4-diamin 
23	2-(4-(2-metyl-1H-indol-5-ylamino)pyrimidin-2-ylamino)-etanol 
24	N4-(2-metyl-1H-indol-5-yl)-N2-(2-morfolinoetyl)pyrimidin-2,4-diamin 

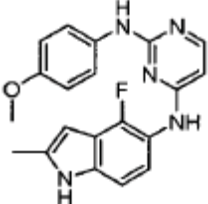
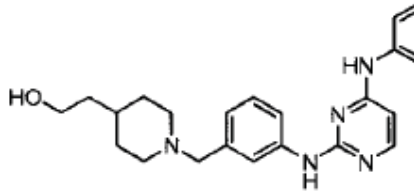
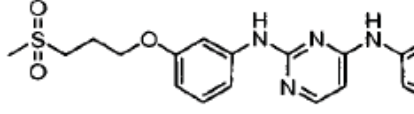
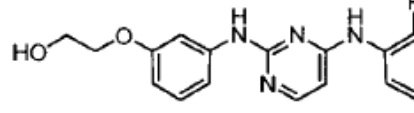
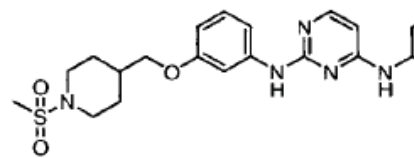
Forbindelse	Navn/struktur
25	N-cyklopropyl-2-(3-(4-(2-metyl-1H-indol-5-ylamino)pyrimidin-2-ylamino)fenyl)acetamid 
28	N-(3-(4-(2-metyl-1H-indol-5-ylamino)pyrimidin-2-ylamino)-fenyl)metansulfonamid 
29	N4-(2-metyl-1H-indol-5-yl)-N2-(3-(2-morfolinoetoksy)fenyl)-pyrimidin-2,4-diamin 
30	N2-(3-(3-(dimetylamino)-propoksy)fenyl)-N4-(2-metyl-H-indol-5-yl)pyrimidin-2,4-diamin 
31	2-(3-(4-(2-metyl-1H-indol-5-ylamino)pyrimidin-2-ylamino)-fenoksy)etanol 

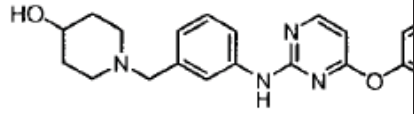
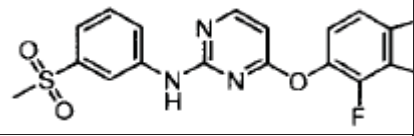
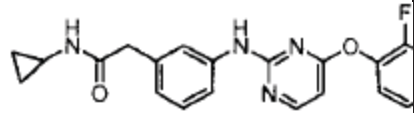
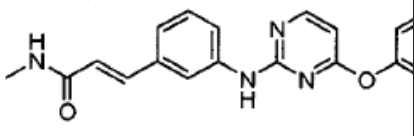
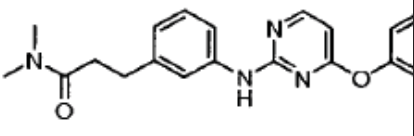
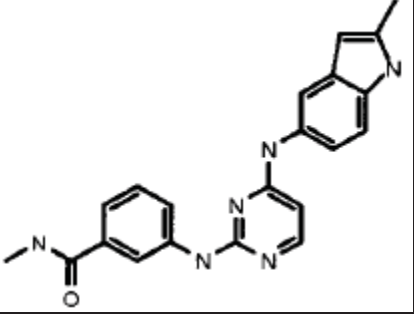
Forbindelse	Navn/struktur
32	2-(2-(4-(2-metyl-1H-indol-5-ylamino)pyrimidin-2-ylamino)-fenoksy)etanol 
33	N4-(2-metyl-1H-indol-5-yl)-N2-(2-(2-morfolinoetoksy)fenyl)-pyrimidin-2,4-diamin 
34	N-metyl-3-(4-(2-metyl-1H-indol-5-ylamino)pyrimidin-2-ylamino)-benzamid 
35	3-(4-(2-metyl-1H-indol-5-ylamino)pyrimidin-2-ylamino)-N-(2-(piperidin-1-yl)etyl)benzamid 

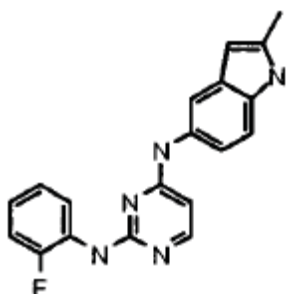
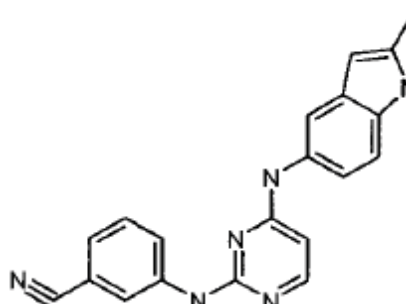
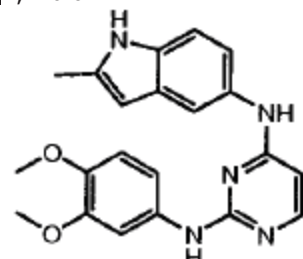
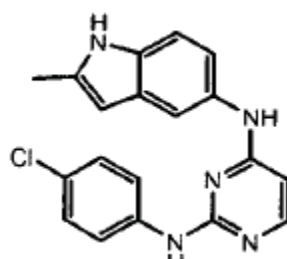
Forbindelse	Navn/struktur
36	N-(2-(dimetylamino)etyl)-3-(4-(2-metyl-1H-indol-5-ylamino)-pyrimidin-2-ylamino)benzamid 
37	N2-(3-(4-metoksyfenyl)-1H-pyrazol-5-yl)-N4-(2-metyl-1H-indol-5-yl)pyrimidin-2,4-diamin 
38	N-(3-etynylfenyl)-4-(2-metyl-1H-indol-5-yloksy)pyrimidin-2-amin 
39	N-(4-metoksyfenyl)-4-(2-metyl-1H-indol-5-yloksy)pyrimidin-2-amin 
42	N-(3-metoksyfenyl)-4-(2-metyl-1H-indol-5-yloksy)pyrimidin-2-amin 

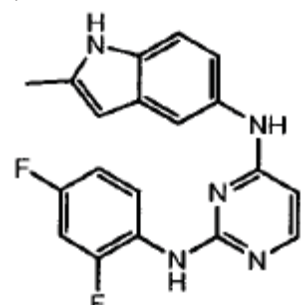
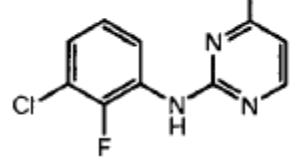
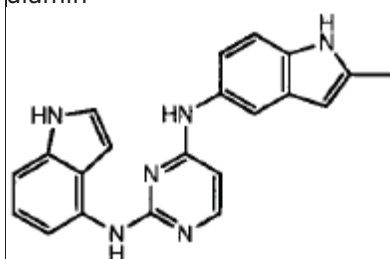
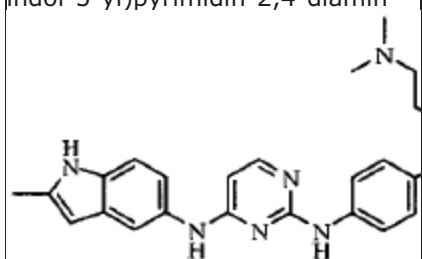
Forbindelse	Navn/struktur
43	4-(2-metyl-1H-indol-5-yloksy)-N-(3-(3-(tiomorfolino-1',1'-dioksid)-propoksy)fenyl)pyrimidin-2-amin 
44	N-metyl-3-(4-(2-metyl-1H-indol-5-yloksy)pyrimidin-2-ylamino)-benzamid 
48	N-(4-(4-(2-metyl-1H-indol-5-yloksy)pyrimidin-2-ylamino)-fenyl)metansulfonamid 
49	2-(3-(4-(2-metyl-1H-indol-5-yloksy)pyrimidin-2-ylamino)-fenyl)-N-(2-morfolinoetyl)-acetamid 
50	4-(2-metyl-1H-indol-5-yloksy)-N-(3-(2-(metylsulfonyl)etoksy)-fenyl)pyrimidin-2-amin 
52	N4-(4-fluor-2-metyl-1H-indol-5-yl)-N2-(3-fluorfenyl)pyrimidin-2,4-diamin 

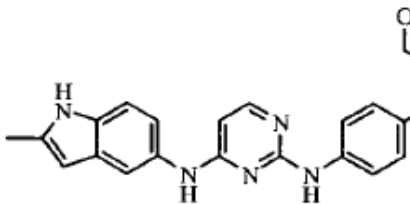
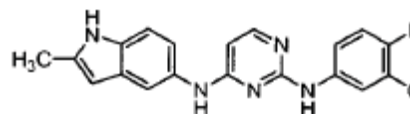
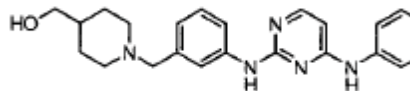
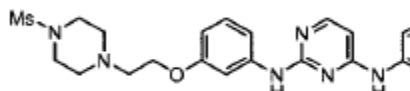
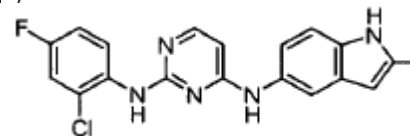
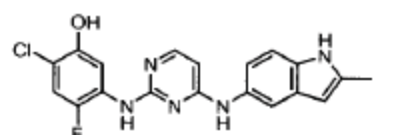
Forbindelse	Navn/struktur
53	N2-(3-klorfenyl)-N4-(4-fluor-2-metyl-1H-indol-5-yl)pyrimidin-2,4-diamin 
54	2-(4-(4-fluor-2-metyl-1H-indol-5-ylamino)pyrimidin-2-ylamino)-benzonitril 
55	N2-(3,5-dimetylfenyl)-N4-(4-fluor-2-metyl-1H-indol-5-yl)-pyrimidin-2,4-diamin 
56	N4-(4-fluor-2-metyl-1H-indol-5-yl)-N2-(2-(trifluormetyl)fenyl)-pyrimidin-2,4-diamin 
57	N2-(2-klorfenyl)-N4-(4-fluor-2-metyl-1H-indol-5-yl)pyrimidin-2,4-diamin 

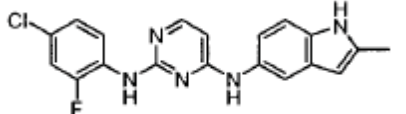
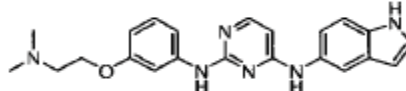
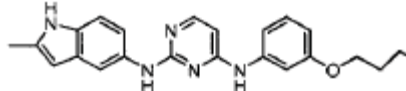
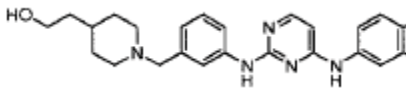
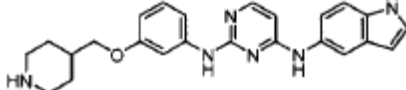
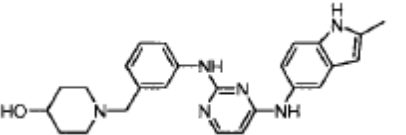
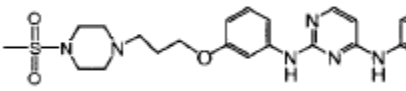
Forbindelse	Navn/struktur
59	N4-(4-fluor-2-metyl-1H-indol-5-yl)-N2-(4-metoksyfenyl)-pyrimidin-2,4-diamin 
61	2-(1-(3-(4-(4-fluor-2-metyl-1H-indol-5-ylamino)pyrimidin-2-ylamino)benzyl)piperidin-4-yl)-etanol 
62	N4-(4-fluor-2-metyl-1H-indol-5-yl)-N2-(3-(3-(metylsulfonyl)-propoksy)fenyl)pyrimidin-2,4-diamin 
63	2-(3-(4-(4-fluor-2-metyl-1H-indol-5-ylamino)pyrimidin-2-ylamino)fenoksy)etanol 
65	N4-(4-fluor-2-metyl-1H-indol-5-yl)-N2-(3-((1-(metylsulfonyl)-piperidin-4-yl)-metoksy)fenyl)-pyrimidin-2,4-diamin 

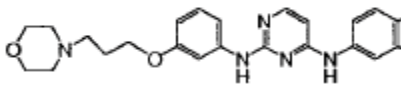
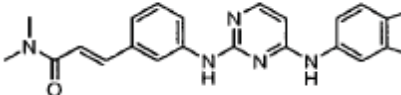
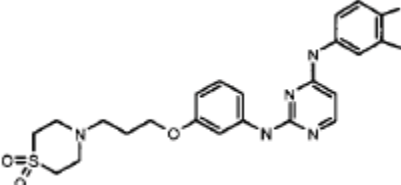
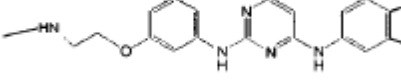
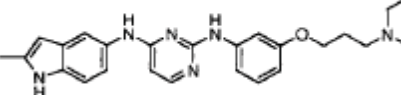
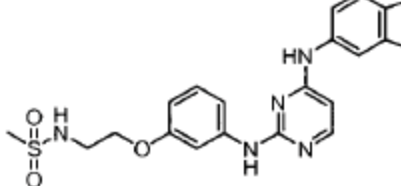
Forbindelse	Navn/struktur
66	1-(3-(4-(4-fluor-2-metyl-1H-indol-5-yloksy)pyrimidin-2-ylamino)benzyl)piperidin-4-ol 
67	4-(4-fluor-2-metyl-1H-indol-5-yloksy)-N-(3-(metylsulfonyl)-fenyl)pyrimidin-2-amin 
68	N-cyklopropyl-2-(3-(4-(4-fluor-2-metyl-1H-indol-5-yloksy)-pyrimidin-2-ylamino)fenyl)-acetamid 
69	(E)-3-(3-(4-(4-fluor-2-metyl-1H-indol-5-yloksy)pyrimidin-2-ylamino)fenyl)-N-metylakrylamid 
70	3-(3-(4-(4-fluor-2-metyl-1H-indol-5-yloksy)pyrimidin-2-ylamino)fenyl)-N,N-dimetylpropanamid 
71	N-metyl-3-(4-(2-metyl-1H-indol-5-ylamino)pyrimidin-2-ylamino)-benzamid 

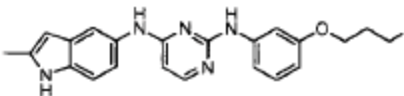
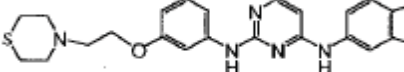
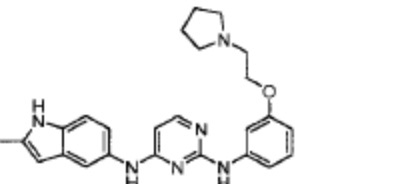
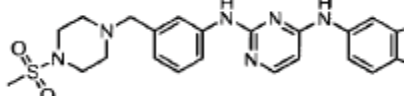
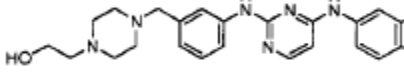
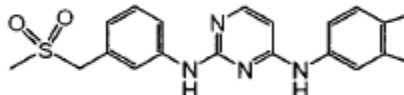
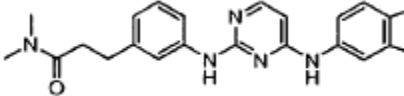
Forbindelse	Navn/struktur
72	N2-(2-fluorfenyl)-N4-(2-metyl-1H-indol-5-yl)pyrimidin-2,4-diamin 
73	3-(4-(2-metyl-1H-indol-5-ylamino)pyrimidin-2-ylamino)-benzonitril 
77	N2-(3,4-dimetoksyfenyl)-N4-(2-metyl-1H-indol-5-yl)pyrimidin-2,4-diamin 
78	N2-(4-klorfenyl)-N4-(2-metyl-1H-indol-5-yl)pyrimidin-2,4-diamin 

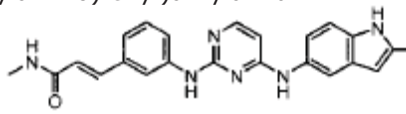
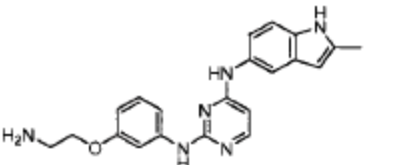
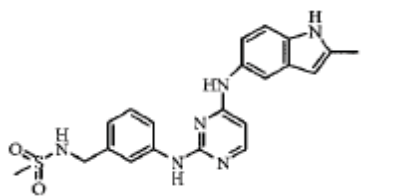
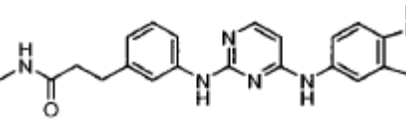
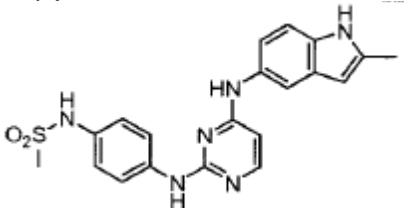
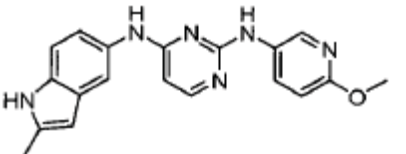
Forbindelse	Navn/struktur
79	N2-(2,4-difluozofenyl)-N4-(2-metyl-1H-indol-5-yl)pyrimidin-2,4-diamin 
80	N2-(3-klor-2-fluorfenyl)-N4-(2-metyl-1H-indol-5-yl)pyrimidin-2,4-diamin 
81	N2-(1H-indol-4-yl)-N4-(2-metyl-1H-indol-5-yl)pyrimidin-2,4-diamin 
82	N2-(4-(3-(dimetylamino)-propoksy)fenyl)-N4-(2-metyl-1H-indol-5-yl)pyrimidin-2,4-diamin 

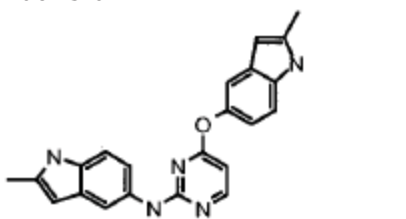
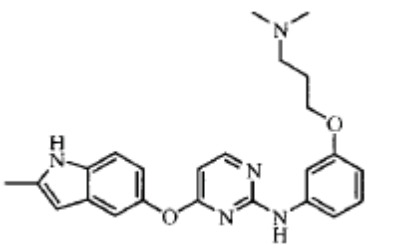
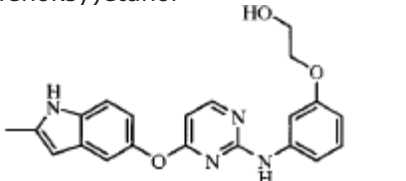
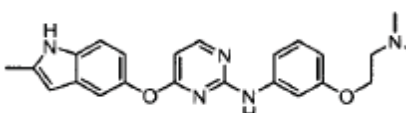
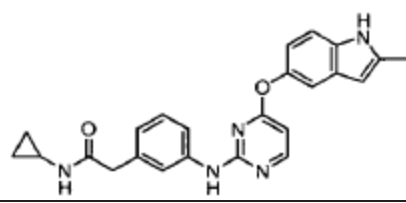
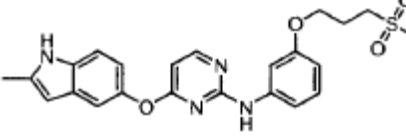
Forbindelse	Navn/struktur
83	2-(4-(4-(2-metyl-1H-indol-5-ylamino)pyrimidin-2-ylamino)-fenoksy)etanol 
84	N2-(3-klor-4-fluorfenyl)-N4-(2-metyl-1H-indol-5-yl)pyrimidin-2,4-diamin 
86	(1-(3-(4-(2-metyl-1H-indol-5-ylamino)pyrimidin-2-ylamino)-benzyl)piperidin-4-yl)metanol 
87	N4-(2-metyl-1H-indol-5-yl)-N2-(3-(2-(4-(metylsulfonyl)-piperazin-1-yl)-etoksy)fenyl)-pyrimidin-2,4-diamin 
89	N2-(2-klor-4-fluorfenyl)-N4-(2-metyl-1H-indol-5-yl)pyrimidin-2,4-diamin 
90	2-klor-4-fluor-5-(4-(2-metyl-1H-indol-5-ylamino)pyrimidin-2-ylamino)fenol 

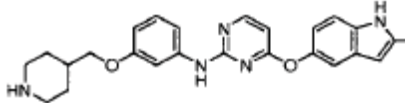
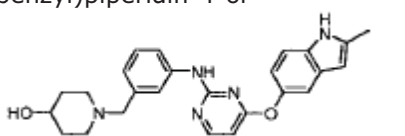
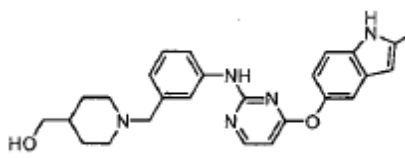
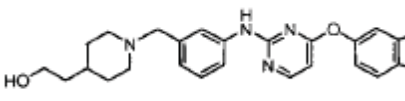
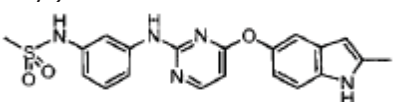
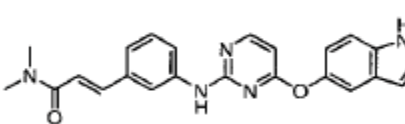
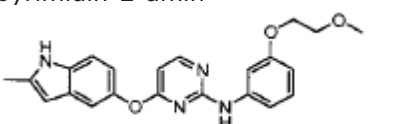
Forbindelse	Navn/struktur
91	N2-(4-klor-2-fluorfenyl)-N4-(2-metyl-1H-indol-5-yl)pyrimidin-2,4-diamin 
92	N2-(3-(2-(dimetylamino)etoksy)-fenyl)-N4-(2-metyl-1H-indol-5-yl)pyrimidin-2,4-diamin 
93	N2-(2-metyl-1H-indol-5-yl)-N4-(3-(3-(metylsulfonyl)propoksy)-fenyl)pyrimidin-2,4-diamin 
94	2-(1-(3-(4-(2-metyl-1H-indol-5-ylamino)pyrimidin-2-ylamino)-benzyl)piperidin-4-yl)etanol 
95	N4-(2-metyl-1H-indol-5-yl)-N2-(3-(piperidin-4-ylmetoksy)fenyl)-pyrimidin-2,4-diamin 
97	1-(3-(4-(2-metyl-1H-indol-5-ylamino)pyrimidin-2-ylamino)-benzyl)piperidin-4-ol 
101	N4-(2-metyl-1H-indol-5-yl)-N2-(3-(3-(4-(metylsulfonyl)-piperazin-1-yl)-propoksy)fenyl)-pyrimidin-2,4-diamin 

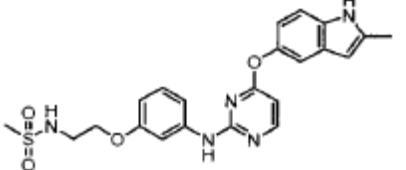
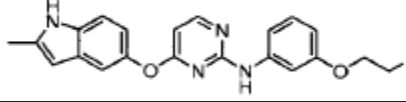
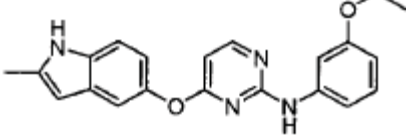
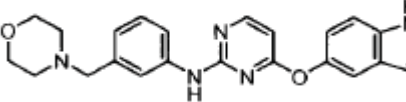
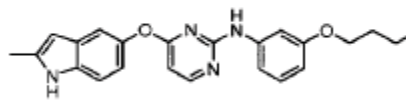
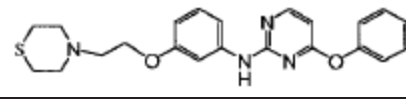
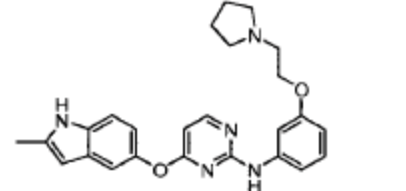
Forbindelse	Navn/struktur
102	N4-(2-metyl-1H-indol-5-yl)-N2-(3-(3-morfolinopropoksy)fenyl)-pyrimidin-2,4-diamin 
104	(E)-N,N-dimetyl-3-(3-(4-(2-metyl-1H-indol-5-ylamino)-pyrimidin-2-ylamino)fenyl)-akrylamid 
105	4-(4-fluor-2-metyl-1H-indol-5-yl)-N-(3-(3-(tiomorfolino-1',1'-dioksid)propoksy)fenyl)pyrimidin-2-amin 
106	N4-(2-metyl-1H-indol-5-yl)-N2-(3-(2-(metylamino)etoksy)fenyl)-pyrimidin-2,4-diamin 
107	4-(4-fluor-2-metyl-1H-indol-5-yloksy)-N-(3-(3-(tiomorfolino-1'-oksid)propoksy)fenyl)pyrimidin-2-amin 
108	N-(2-(3-(4-(2-metyl-1H-indol-5-ylamino)pyrimidin-2-ylamino)-fenoksy)etyl)metansulfonamid 

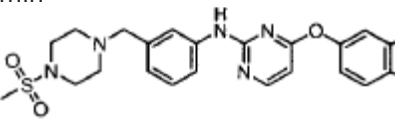
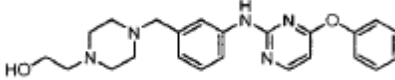
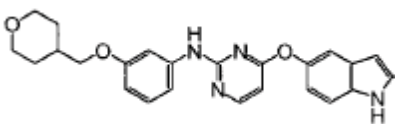
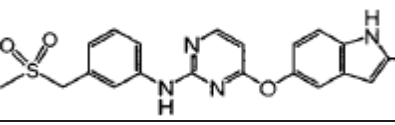
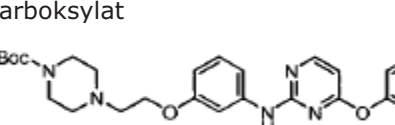
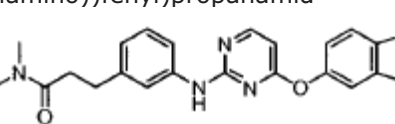
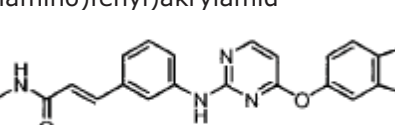
Forbindelse	Navn/struktur
109	N4-(2-metyl-1H-indol-5-yl)-N2-(3-(3-tiomorfolinopropoksy)fenyl)pyrimidin-2,4-diamin 
111	N4-(2-metyl-1H-indol-5-yl)-N2-(3-(2-tiomorfolinoetoksy)fenyl)-pyrimidin-2,4-diamin 
112	N4-(2-metyl-1H-indol-5-yl)-N2-(3-(2-pyrrolidinetoksy)fenyl)-pyrimidin-2,4-diamin 
115	N4-(2-metyl-1H-indol-5-yl)-N2-(3-((4-(metylsulfonyl)piperazin-1-yl)-metyl)fenyl)pyrimidin-2,4-diamin 
116	2-(4-(3-(4-(2-metyl-1H-indol-5-ylamino)pyrimidin-2-ylamino)-benzyl)piperazin-1-yl)etanol 
117	N4-(2-metyl-1H-indol-5-yl)-N2-(3-(metylsulfonylmetyl)fenyl)-pyrimidin-2,4-diamin 
118	N,N-dimetyl-3-(3-(4-(2-metyl-1H-indol-5-ylamino)pyrimidin-2-ylamino)fenyl)propanamid 

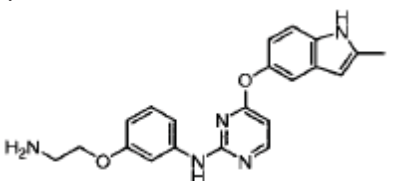
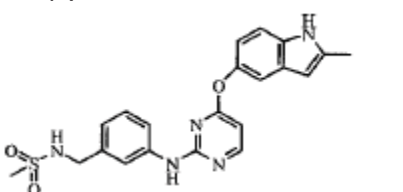
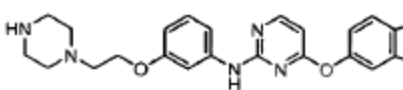
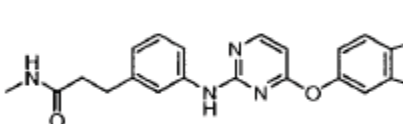
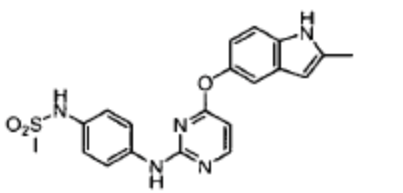
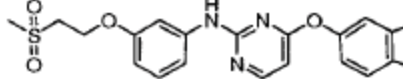
Forbindelse	Navn/struktur
119	(E)-N-metyl-3-(3-(4-(2-metyl-1H-indol-5-ylamino)pyrimidin-2-ylamino)fenyl)akrylamid 
121	N2-(3-(2-aminoetoksy)fenyl)-N4-(2-metyl-1H-indol-5-yl)pyrimidin-2,4-diamin 
122	N-(3-(4-(2-metyl-1H-indol-5-ylamino)pyrimidin-2-ylamino)-benzyl)metansulfonamid 
124	N-metyl-3-(3-(4-(2-metyl-1H-indol-5-ylamino)pyrimidin-2-ylamino)fenyl)propanamid 
130	N-(4-(4-(2-metyl-1H-indol-5-ylamino)pyrimidin-2-ylamino)-fenyl)metansulfonamid 
132	N2-(6-metoksypyridin-3-yl)-N4-(2-metyl-1H-indol-5-yl)pyrimidin-2,4-diamin 

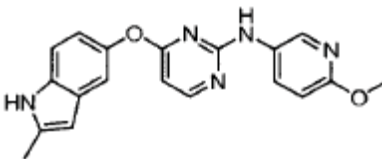
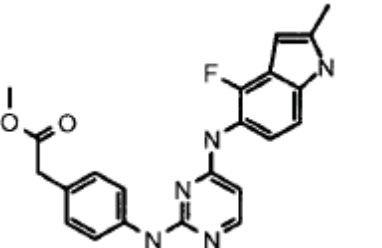
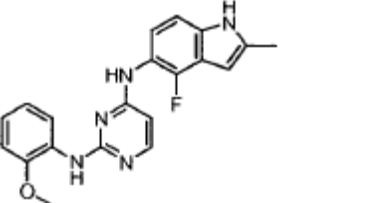
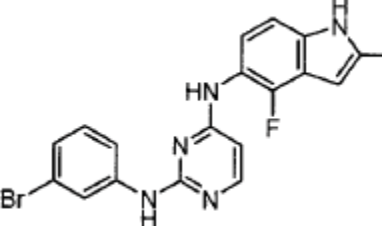
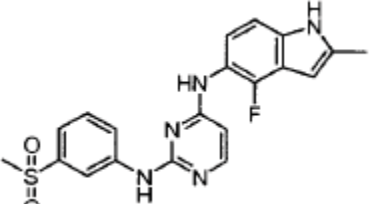
Forbindelse	Navn/struktur
133	2-metyl-N-(4-(2-metyl-1H-indol-5-yloksy)pyrimidin-2-yl)-1H-indol-5-amin 
134	N-(3-(3-(dimetylamino)-propoksy)fenyl)-4-(2-metyl-1H-indol-5-yloksy)pyrimidin-2-amin 
135	2-(3-(4-(2-metyl-1H-indol-5-yloksy)pyrimidin-2-ylamino)-fenoksy)etanol 
136	N-(3-(2-(dimetylamino)etoksy)-fenyl)-4-(2-metyl-1H-indol-5-yloksy)pyrimidin-2-amin 
137	N-cyklopropyl-2-(3-(4-(2-metyl-1H-indol-5-yloksy)pyrimidin-2-ylamino)fenyl)acetamid 
138	4-(2-metyl-1H-indol-5-yloksy)-N-(3-(3-(metylsulfonyl)propoksy)-fenyl)pyrimidin-2-amin 

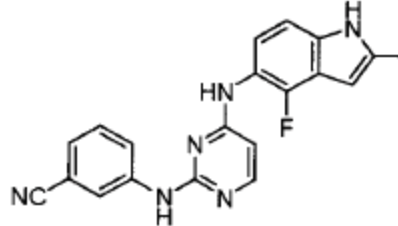
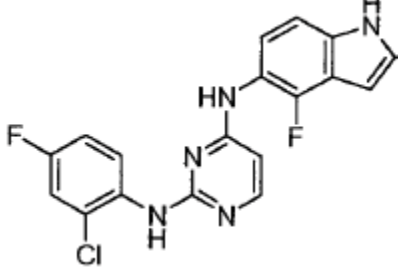
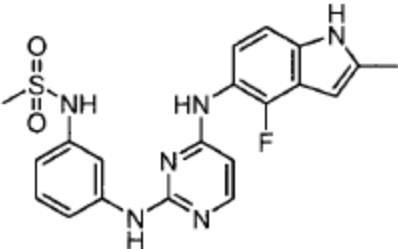
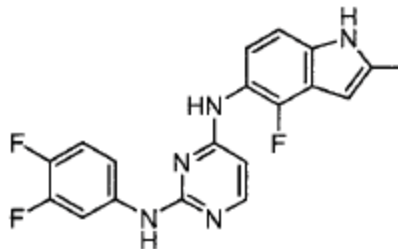
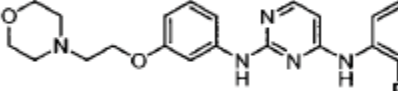
Forbindelse	Navn/struktur
139	4-(2-metyl-1H-indol-5-yloksy)-N-(3-(piperidin-4-ylmetoksy)fenyl)-pyrimidin-2-amin 
143	1-(3-(4-(2-metyl-1H-indol-5-yloksy)pyrimidin-2-ylamino)-benzyl)piperidin-4-ol 
144	(1-(3-(4-(2-metyl-1H-indol-5-yloksy)pyrimidin-2-ylamino)-benzyl)piperidin-4-yl)metanol 
145	2-(1-(3-(4-(2-metyl-1H-indol-5-yloksy)pyrimidin-2-ylamino)-benzyl)piperidin-4-yl)etanol 
146	N-(3-(4-(2-metyl-1H-indol-5-yloksy)pyrimidin-2-ylamino)-fenyl)metansulfonamid 
148	(E)-N,N-dimetyl-3-(3-(4-(2-metyl-1H-indol-5-yloksy)-pyrimidin-2-ylamino)fenyl)-akrylamid 
150	N-(3-(2-metoksyetoksy)fenyl)-4-(2-metyl-1H-indol-5-yloksy)-pyrimidin-2-amin 

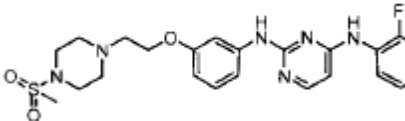
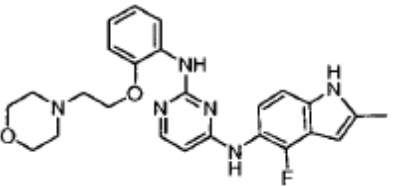
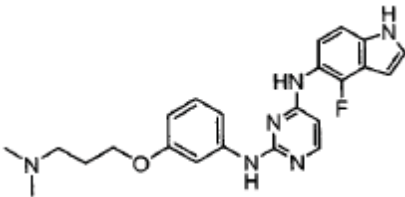
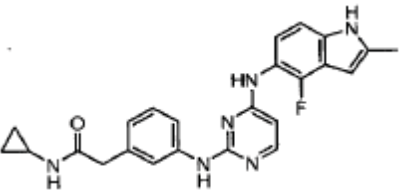
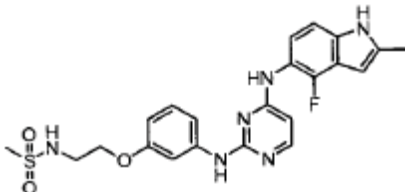
Forbindelse	Navn/struktur
152	N-(2-(3-(4-(2-metyl-1H-indol-5-yloksy)pyrimidin-2-ylamino)-fenoksy)etyl)metansulfonamid 
154	4-(2-metyl-1H-indol-5-yloksy)-N-(3-(2-morfolinoetoksy)fenyl)-pyrimidin-2-amin 
156	N-(3-(2-metoksyetoksy)fenyl)-4-(2-metyl-1H-indol-5-yloksy)-pyrimidin-2-amin 
157	4-(2-metyl-1H-indol-5-yloksy)-N-(3-(morfolinometyl)fenyl)-pyrimidin-2-amin 
158	4-(2-metyl-1H-indol-5-yloksy)-N-(3-(3-tiomorfolinopropoksy)-fenyl)pyrimidin-2-amin 
162	4-(2-metyl-1H-indol-5-yloksy)-N-(3-(2-tiomorfolinoetoksy)fenyl)-pyrimidin-2-amin 
163	4-(2-metyl-1H-indol-5-yloksy)-N-(3-(2-(pyrrolidin-1-yl)etoksy)-fenyl)pyrimidin-2-amin 

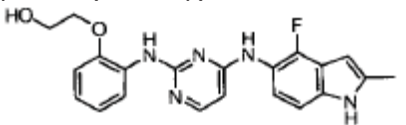
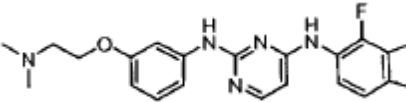
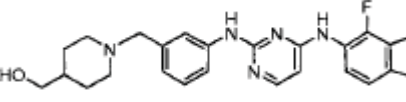
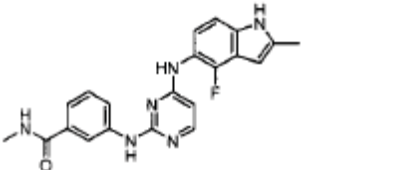
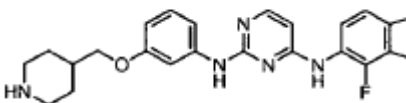
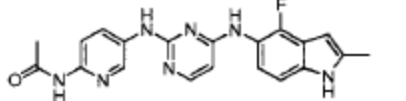
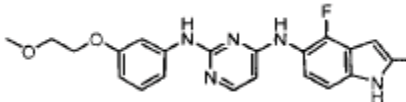
Forbindelse	Navn/struktur
164	4-(2-metyl-1H-indol-5-yloksy)-N-(3-((4-(metylsulfonyl)piperazin-1-yl)-metyl)fenyl)pyrimidin-2-amin 
165	2-(4-(3-(4-(2-metyl-1H-indol-5-yloksy)pyrimidin-2-ylamino)-benzyl)piperazin-1-yl)etanol 
166	4-(2-metyl-1H-indol-5-yloksy)-N-(3-((tetrahydro-2H-pyran-4-yl)-metoksy)fenyl)pyrimidin-2-amin 
167	4-(2-metyl-1H-indol-5-yloksy)-N-(3-(metylsulfonylmetyl)fenyl)-pyrimidin-2-amin 
168	tert-butyl-4-(2-(3-(4-(2-metyl-1H-indol-5-yloksy)pyrimidin-2-ylamino)fenoksy)etyl)piperazin-1-karboksylat 
169	N,N-dimetyl-3-(3-(4-(2-metyl-1H-indol-5-yloksy)pyrimidin-2-ylamino))fenyl)propanamid 
170	(E)-N-metyl-3-(3-(4-(2-metyl-1H-indol-5-yloksy)pyrimidin-2-ylamino)fenyl)akrylamid 

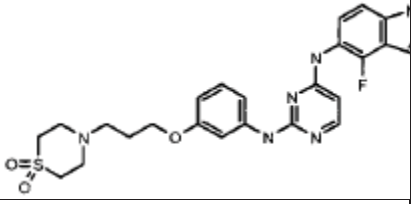
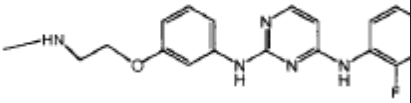
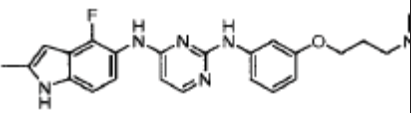
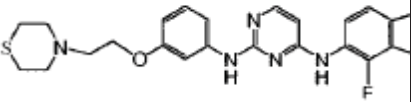
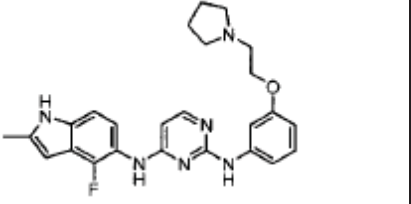
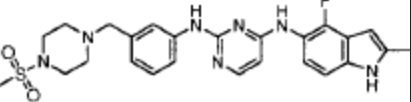
Forbindelse	Navn/struktur
172	N-(3-(2-aminoetoksy)fenyl)-4-(2-metyl-1H-indol-5-yloksy)-pyrimidin-2-amin 
173	N-(3-(4-(2-metyl-1H-indol-5-yloksy)pyrimidin-2-ylamino)-benzyl)metansulfonamid 
175	4-(2-metyl-1H-indol-5-yloksy)-N-(3-(2-(piperazin-1-yl)etoksy)-fenyl)pyrimidin-2-amin 
179	N-metyl-3-(3-(4-(2-metyl-1H-indol-5-yloksy)pyrimidin-2-ylamino))fenyl)propanamid 
181	N-(4-(4-(2-metyl-1H-indol-5-yloksy)pyrimidin-2-ylamino)-fenyl)metansulfonamid 
183	4-(2-metyl-1H-indol-5-yloksy)-N-(3-(2-(metylsulfonyl)etoksy)-fenyl)pyrimidin-2-amin 

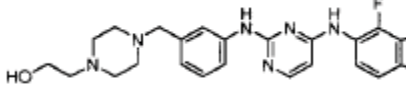
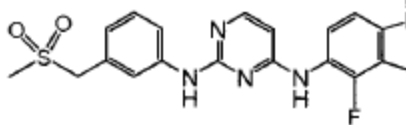
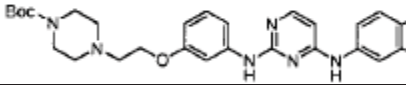
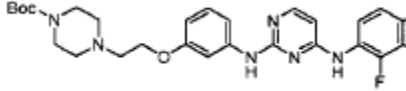
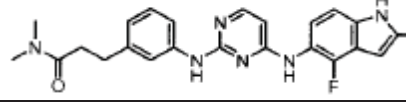
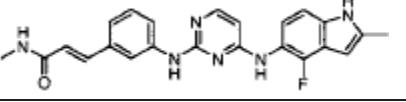
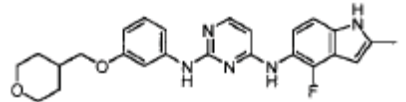
Forbindelse	Navn/struktur
185	N-(6-metoksypyridin-3-yl)-4-(2-metyl-1H-indol-5-yloksy)-pyrimidin-2-amin 
186	metyl-2-(4-(4-(4-fluor-2-metyl-1H-indol-5-ylamino)pyrimidin-2-ylamino)fenyl)acetat 
187	N4-(4-fluor-2-metyl-1H-indol-5-yl)-N2-(2-metoksyfenyl)-pyrimidin-2,4-diamin 
188	N2-(3-bromfenyl)-N4-(4-fluor-2-metyl-1H-indol-5-yl)pyrimidin-2,4-diamin 
189	N4-(4-fluor-2-metyl-1H-indol-5-yl)-N2-(3-(metylsulfonyl)fenyl)-pyrimidin-2,4-diamin 

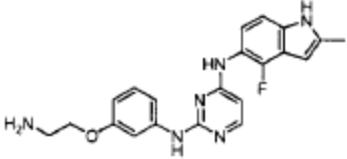
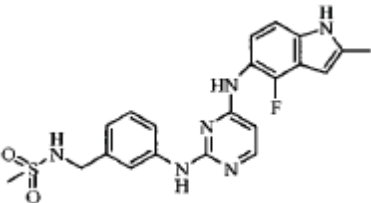
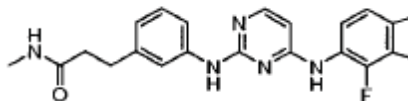
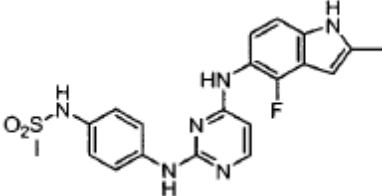
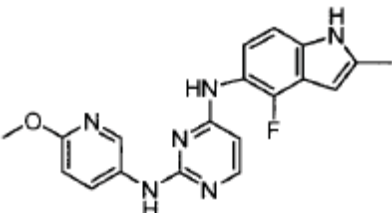
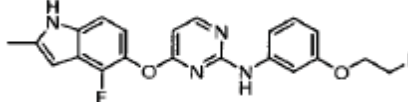
Forbindelse	Navn/struktur
190	3-(4-(4-fluor-2-metyl-1H-indol-5-ylamino)pyrimidin-2-ylamino)-benzonitril 
191	N2-(2-klor-4-fluorfenyl)-N4-(4-fluor-2-metyl-1H-indol-5-yl)-pyrimidin-2,4-diamin 
192	N-(3-(4-(4-fluor-2-metyl-1H-indol-5-ylamino)pyrimidin-2-ylamino)fenyl)metansulfonamid 
193	N2-(3,4-difluorfenyl)-N4-(4-fluor-2-metyl-1H-indol-5-yl)pyrimidin-2,4-diamin 
194	N4-(4-fluor-2-metyl-1H-indol-5-yl)-N2-(3-(2-morfolinoetoksy)-fenyl)pyrimidin-2,4-diamin 

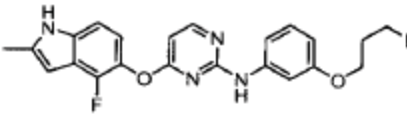
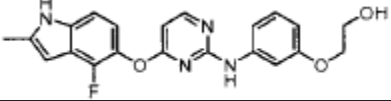
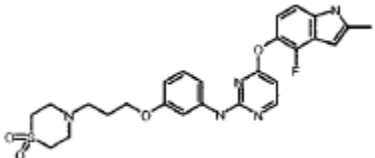
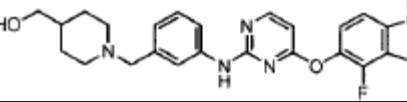
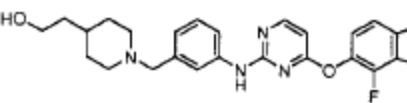
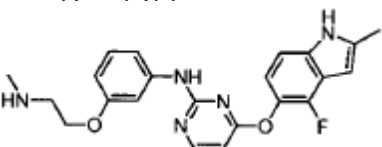
Forbindelse	Navn/struktur
195	N4-(4-fluor-2-metyl-1H-indol-5-yl)-N2-(3-(2-(4-(metylsulfonyl)-piperazin-1-yl)-etoksy)fenyl)-pyrimidin-2,4-diamin 
196	N4-(4-fluor-2-metyl-1H-indol-5-yl)-N2-(2-(2-morfolinoetoksy)-fenyl)pyrimidin-2,4-diamin 
197	N2-(3-(3-(dimetylamino)-propoksy)fenyl)-N4-(4-fluor-2-metyl-1H-indol-5-yl)pyrimidin-2,4-diamin 
198	N-cyklopropyl-2-(3-(4-(4-fluor-2-metyl-1H-indol-5-ylamino)-pyrimidin-2-ylamino)fenyl)-acetamid 
199	N-(2-(3-(4-(4-fluor-2-metyl-1H-indol-5-ylamino)pyrimidin-2-ylamino)fenoksy)etyl)-metansulfonamid 

Forbindelse	Navn/struktur
200	2-(2-(4-(4-fluor-2-metyl-1H-indol-5-ylamino)pyrimidin-2-ylamino)fenoksy)etanol 
201	N2-(3-(2-(dimetylamino)etoksy)-fenyl)-N4-(4-fluor-2-metyl-1H-indol-5-yl)pyrimidin-2,4-diamin 
202	(1-(3-(4-(4-fluor-2-metyl-1H-indol-5-ylamino)pyrimidin-2-ylamino)benzyl)piperidin-4-yl)-metanol 
203	3-(4-(4-fluor-2-metyl-1H-indol-5-ylamino)pyrimidin-2-ylamino)-N-metylbenzamid 
205	N4-(4-fluor-2-metyl-1H-indol-5-yl)-N2-(3-(piperidin-4-ylmetoksy)fenyl)pyrimidin-2,4-diamin 
208	N-(5-(4-(4-fluor-2-metyl-1H-indol-5-ylamino)pyrimidin-2-ylamino)pyridin-2-yl)acetamid 
211	N4-(4-fluor-2-metyl-1H-indol-5-yl)-N2-(3-(2-metoksyetoksy)-fenyl)pyrimidin-2,4-diamin 

Forbindelse	Navn/struktur
212	4-(4-fluor-2-metyl-1H-indol-5-yl)-N-(3-(3-(tiomorfolino-1',1'-dioksid)propoksy)fenyl)pyrimidin-2-amin 
214	N4-(4-fluor-2-metyl-1H-indol-5-yl)-N2-(3-(2-(metylamin)-etoksy)fenyl)pyrimidin-2,4-diamin 
216	N4-(4-fluor-2-metyl-1H-indol-5-yl)-N2-(3-(3-tiomorfolinopropoksy)fenyl)-pyrimidin-2,4-diamin 
218	N4-(4-fluor-2-metyl-1H-indol-5-yl)-N2-(3-(2-tiomorfolinoetoksy)-fenyl)pyrimidin-2,4-diamin 
219	N4-(4-fluor-2-metyl-1H-indol-5-yl)-N2-(3-(2-(pyrrolidin-1-yl)-etoksy)fenyl)pyrimidin-2,4-diamin 
220	N4-(4-fluor-2-metyl-1H-indol-5-yl)-N2-(3-((4-(metylsulfonyl)-piperazin-1-yl)-metyl)fenyl)-pyrimidin-2,4-diamin 

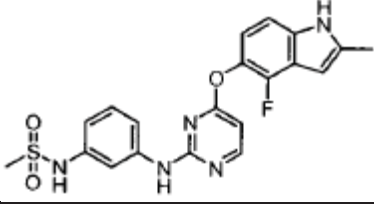
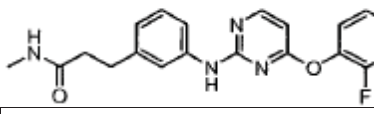
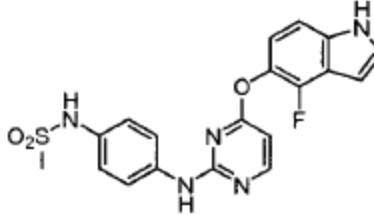
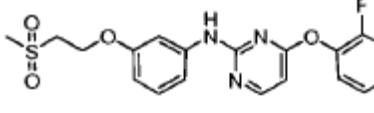
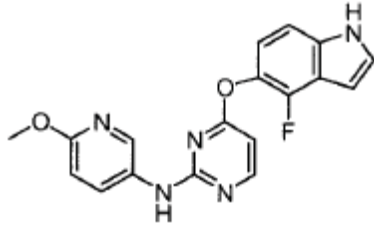
Forbindelse	Navn/struktur
221	2-(4-(3-(4-(4-fluor-2-metyl-1H-indol-5-ylamino)pyrimidin-2-ylamino)benzyl)piperazin-1-yl)-etanol 
223	N4-(4-fluor-2-metyl-1H-indol-5-yl)-N2-(3-(metylsulfonylmetyl)-fenyl)pyrimidin-2,4-diamin 
224	tert-butyl-4-(2-(3-(4-(2-metyl-1H-indol-5-ylamino)pyrimidin-2-ylamino)fenoksy)etyl)piperazin-1-karboksylat 
225	tert-butyl-4-(2-(3-(4-(4-fluor-2-metyl-1H-indol-5-ylamino)-pyrimidin-2-ylamino)fenoksy)-etyl)piperazin-1-karboksylat 
226	3-(3-(4-(4-fluor-2-metyl-1H-indol-5-ylamino)pyrimidin-2-ylamino))fenyl)-N,N-dimetylpropanamid 
227	(E)-3-(3-(4-(4-fluor-2-metyl-1H-indol-5-ylamino)pyrimidin-2-ylamino)fenyl)-N-metylakrylamid 
228	N4-(4-fluor-2-metyl-1H-indol-5-yl)-N2-(3-((tetrahydro-2H-pyran-4-yl)metoksy)fenyl)pyrimidin-2,4-diamin 

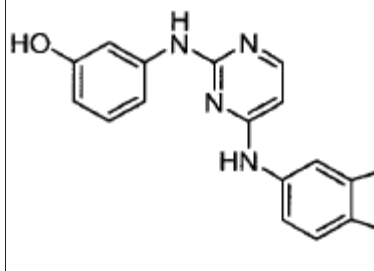
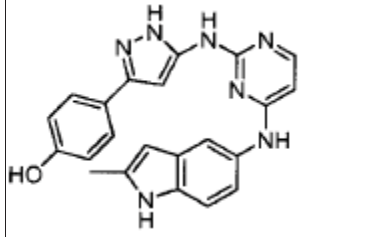
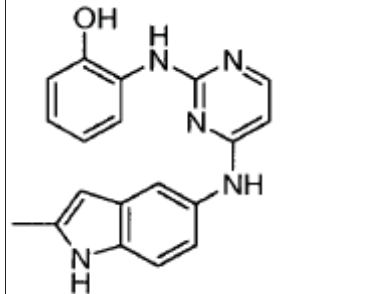
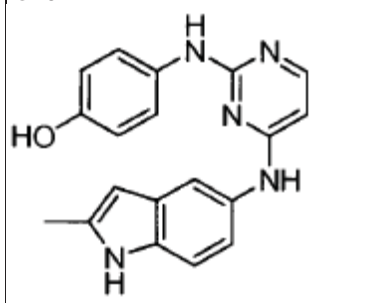
Forbindelse	Navn/struktur
229	N2-(3-(2-aminoetoksy)fenyl)-N4-(4-fluor-2-metyl-1H-indol-5-yl)-pyrimidin-2,4-diamin 
230	N-(3-(4-(4-fluor-2-metyl-1H-indol-5-ylamino)pyrimidin-2-ylamino)benzyl)metansulfonamid 
234	3-(3-(4-(4-fluor-2-metyl-1H-indol-5-ylamino)pyrimidin-2-ylamino)fenyl)-N-metylpropanamid 
236	N-(4-(4-(4-fluor-2-metyl-1H-indol-5-ylamino)pyrimidin-2-ylamino)fenyl)metansulfonamid 
241	N4-(4-fluor-2-metyl-1H-indol-5-yl)-N2-(6-metoksypyridin-3-yl)-pyrimidin-2,4-diamin 
242	4-(4-fluor-2-metyl-1H-indol-5-yloksy)-N-(3-(2-morfolinoetoksy)fenyl)pyrimidin-2-amin 

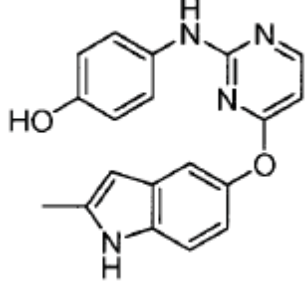
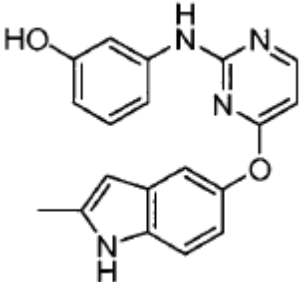
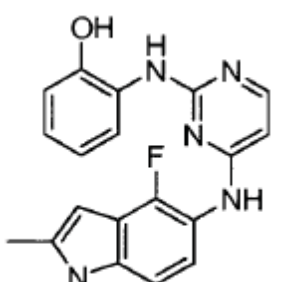
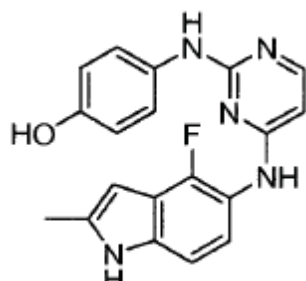
Forbindelse	Navn/struktur
243	4-(4-fluor-2-metyl-1H-indol-5-yloksy)-N-(3-(3-morfolinopropoksy)fenyl)-pyrimidin-2-amin 
244	2-(3-(4-(4-fluor-2-metyl-1H-indol-5-yloksy)pyrimidin-2-ylamino)fenoksy)etanol 
245	4-(4-fluor-2-metyl-1H-indol-5-yloksy)-N-(3-(3-(tiomorfolino-1',1'-dioksid)-propoksy)fenyl)-pyrimidin-2-amin 
251	(1-(3-(4-(4-fluor-2-metyl-1H-indol-5-yloksy)pyrimidin-2-ylamino)benzyl)piperidin-4-yl)-metanol 
252	2-(1-(3-(4-(4-fluor-2-metyl-1H-indol-5-yloksy)pyrimidin-2-ylamino)benzyl)piperidin-4-yl)-etanol 
253	4-(4-fluor-2-metyl-1H-indol-5-yloksy)-N-(3-(2-(metylamino)-etoksy)fenyl)pyrimidin-2-amin 

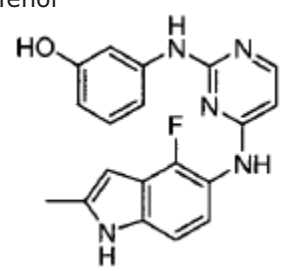
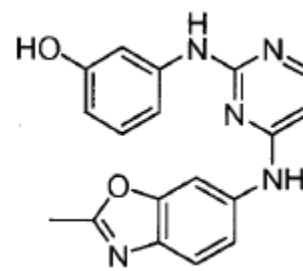
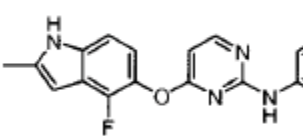
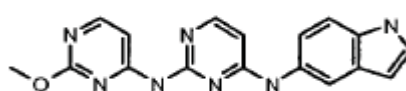
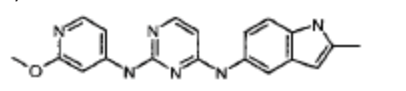
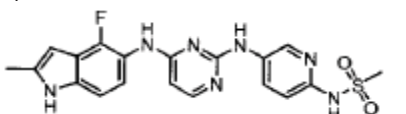
Forbindelse	Navn/struktur
255	4-(4-fluor-2-metyl-1H-indol-5-yloksy)-N-(3-(morfolinometyl)-fenyl)pyrimidin-2-amin
257	3-(4-(4-fluor-2-metyl-1H-indol-5-yloksy)pyrimidin-2-ylamino)-N-metylbenzamid
258	N-(2-(3-(4-(4-fluor-2-metyl-1H-indol-5-yloksy)pyrimidin-2-ylamino)fenoksy)etyl)-metansulfonamid
260	4-(4-fluor-2-metyl-1H-indol-5-yloksy)-N-(3-(3-tiomorfolinopropoksy)fenyl)-pyrimidin-2-amin
263	4-(4-fluor-2-metyl-1H-indol-5-yloksy)-N-(3-(2-tiomorfolinoetoksy)fenyl)-pyrimidin-2-amin
264	4-(4-fluor-2-metyl-1H-indol-5-yloksy)-N-(3-(2-(pyrrolidin-1-yl)-etoksy)fenyl)pyrimidin-2-amin

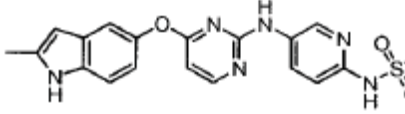
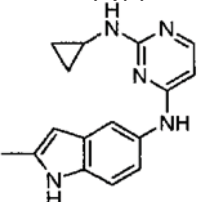
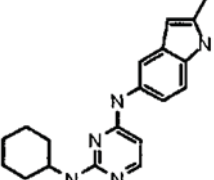
Forbindelse	Navn/struktur
265	4-(4-fluor-2-metyl-1H-indol-5-yloksy)-N-(3-((4-(metylsulfonyl)-piperazin-1-yl)-metyl)fenyl)-pyrimidin-2-amin
266	2-(4-(3-(4-(4-fluor-2-metyl-1H-indol-5-yloksy)pyrimidin-2-ylamino)benzyl)piperazin-1-yl)-etanol
267	4-(4-fluor-2-metyl-1H-indol-5-yloksy)-N-(3-((tetrahydro-2H-pyran-4-yl)metoksy)fenyl)-pyrimidin-2-amin
269	tert-butyl-4-(2-(3-(4-(4-fluor-2-metyl-1H-indol-5-yloksy)-pyrimidin-2-ylamino)fenoksy)-etyl)piperazin-1-karboksylat
271	N-(3-(2-aminoetoksy)fenyl)-4-(4-fluor-2-metyl-1H-indol-5-yloksy)-pyrimidin-2-amin
272	N-(3-(4-(4-fluor-2-metyl-1H-indol-5-yloksy)pyrimidin-2-ylamino)benzyl)metansulfonamid

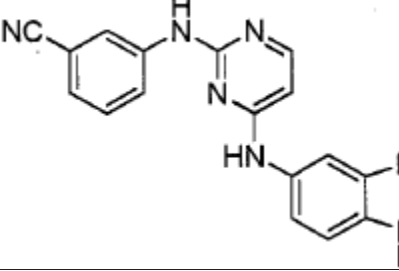
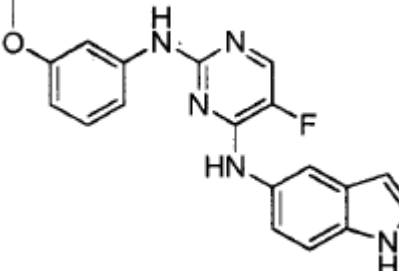
Forbindelse	Navn/struktur
276	N-(3-(4-(4-fluor-2-metyl-1H-indol-5-yloksy)pyrimidin-2-ylamino)fenyl)metansulfonamid 
278	3-(3-(4-(4-fluor-2-metyl-1H-indol-5-yloksy)pyrimidin-2-ylamino)fenyl)-N-metylpropanamid 
280	N-(4-(4-(4-fluor-2-metyl-1H-indol-5-yloksy)pyrimidin-2-ylamino)fenyl)metansulfonamid 
282	4-(4-fluor-2-metyl-1H-indol-5-yloksy)-N-(3-(2-(metylsulfonyl)etoksy)fenyl)pyrimidin-2-amin 
283	4-(4-fluor-2-metyl-1H-indol-5-yloksy)-N-(6-metoksy-pyridin-3-yl)pyrimidin-2-amin 

Forbindelse	Navn/struktur
284	3-(4-(2-metyl-1H-indol-5-ylamino)pyrimidin-2-ylamino)-fenol 
285	4-(5-(4-(2-metyl-1H-indol-5-ylamino)pyrimidin-2-ylamino)-1H-pyrazol-3-yl)fenol 
286	2-(4-(2-metyl-1H-indol-5-ylamino)pyrimidin-2-ylamino)-fenol 
287	4-(4-(2-metyl-1H-indol-5-ylamino)pyrimidin-2-ylamino)-fenol 

Forbindelse	Navn/struktur
289	4-(4-(2-metyl-1H-indol-5-yloksy)pyrimidin-2-ylamino)fenol 
290	3-(4-(2-metyl-1H-indol-5-yloksy)pyrimidin-2-ylamino)fenol 
291	2-(4-(4-fluor-2-metyl-1H-indol-5-ylamino)pyrimidin-2-ylamino)-fenol 
292	4-(4-(4-fluor-2-metyl-1H-indol-5-ylamino)pyrimidin-2-ylamino)-fenol 

Forbindelse	Navn/struktur
293	3-(4-(4-fluor-2-metyl-1H-indol-5-ylamino)pyrimidin-2-ylamino)-fenol 
294	3-(4-(4-metylbenzo[d]oksazol-6-ylamino)pyrimidin-2-ylamino)-fenol 
295	3-(4-(4-fluor-2-metyl-1H-indol-5-yloksy)pyrimidin-2-ylamino)fenol 
296	N-(2-metoksypyrimidin-4-yl)-N-(2-metyl-1H-indol-5-yl)pyrimidin-2,4-diamin 
297	N-(2-metoksypyridin-4-yl)-N-(2-metyl-1H-indol-5-yl)pyrimidin-2,4-diamin 
298	N-(2-metoksypyridin-4-yl)-N-(2-metyl-1H-indol-5-yl)pyrimidin-2,4-diamin 

Forbindelse	Navn/struktur
299	N-(5-(4-(2-metyl-1H-indol-5-yloksy)pyrimidin-2-ylamino)-pyridin-2-yl)metansulfonamid 
302	N2-cyklopropyl-N4-(2-metyl-1H-indol-5-yl)pyrimidin-2,4-diamin 
303	N2-cykloheksyl-N4-(2-metyl-1H-indol-5-yl)pyrimidin-2,4-diamin 

Forbindelse	Navn/struktur
305	3-(4-(2-metyl-1H-indol-5-ylamino)pyrimidin-2-ylamino)-benzonitril 
309	N2-(3-metoksylfenyl)-N4-(2-metyl-1H-indol-5-yl)pyrimidin-2,4-diamin 

5. Anvendelse av en virksam mengde av en forbindelse eller et farmasøytisk akseptabelt salt derav ifølge et hvilket som helst av kravene 1 til 4 ved fremstilling av et legemiddel for behandling av en angiogenese-relatert forstyrrelse.

5 **6.** Anvendelse ifølge krav 5, hvor den angiogenese-relaterte forstyrrelse er kreft eller aldersrelatert makuløs degenerasjon.

7. Anvendelse av en virksam mengde av en forbindelse eller et farmasøytisk akseptabelt salt derav ifølge et hvilket som helst av kravene 1 til 4 ved fremstilling av et legemiddel for å inhibere angiogenese i et individ.

10 **8.** Forbindelse eller et farmasøytisk akseptabelt salt derav ifølge et hvilket som helst av kravene 1 til 4 for anvendelse ved behandling av en angiogenese-relatert forstyrrelse.

9. Forbindelse eller et farmasøytisk akseptabelt salt derav ifølge krav 8, hvor den angiogenese-relaterte forstyrrelse er kreft eller aldersrelatert maculadegenerasjon.

15 **10.** Forbindelse eller et farmasøytisk akseptabelt salt derav ifølge et hvilket som helst av kravene 1 til 4 for anvendelse ved inhibering av angiogenese i et individ.

11. Ikke-terapeutisk metode ved inhibering av aktiviteten av kinaseinnføylesdomene-receptor, omfattende å bringe receptoren i berøring med en virksam mengde av en forbindelse eller et farmasøytisk akseptabelt salt derav ifølge et hvilket som helst av kravene 1 til 4.