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(54)	Title	INHIBITORS OF LYSINE SPECIFIC DEMETHYLASE-1
(56)	References Cited:	US-A1- 2004 242 608 US-B2- 7 037 918 US-A1- 2010 048 591 US-B2- 7 767 669 HAN, H ET AL.: 'Synergistic Re-Activation of Epigenetically Silenced Genes by Combinatorial Inhibition of DNMTs and LSD1 in Cancer Cells.' PLOS ONE. vol. 8, no. 9, 2013, page E75136, XP055235759 None

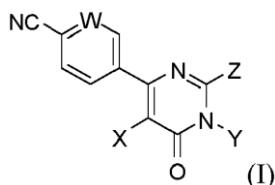
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Patentkrav

1. Forbindelse som har strukturen av formel (I), eller et farmasøytisk akseptabelt salt derav,



hvor,

W er N, C-H eller C-F;

X er hydrogen, halogen, -CN, eventuelt substituert alkyl, eventuelt substituert alkynyl, eventuelt substituert karbosyklalkynyl, eventuelt substituert aryl eller eventuelt substituert heteroaryl;

Y er hydrogen, eventuelt substituert alkyl, eventuelt substituert sykloalkyl eller eventuelt substituert sykloalkylalkyl;

Z er en eventuelt substituert gruppe valgt fra alkyl, karbosykl, C-festet heterosykl, N-festet heterosykl, heterosyklalkyl, heterosyklalkenyl,

-O-heterosykl, -N(R)-heterosykl, -O-heterosyklalkyl, -N(R)-heterosyklalkyl, -N(R)(C₁-C₄alkylen)-NR₂, -O(C₁-C₄alkylen)-NR₂; og

R er hydrogen eller C₁-C₄alkyl.

2. Forbindelsen ifølge krav 1, eller et farmasøytisk akseptabelt salt derav, hvor W er C-H eller hvor W er C-F.

3. Forbindelsen ifølge et hvilket som helst av kravene 1-2, eller et farmasøytisk akseptabelt salt derav, hvor X er valgt fra gruppen som består av hydrogen, halogen, eventuelt substituert alkynalkynyl, eventuelt substituert karbosyklalkynyl, eventuelt substituert aryl og eventuelt substituert heteroaryl.

4. Forbindelsen ifølge krav 3, eller et farmasøytisk akseptabelt salt derav, hvor det eventuelt substituerte arylet er et eventuelt substituert fenyl.

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5. Forbindelsen ifølge krav 3, eller et farmasøytisk akseptabelt salt derav, hvori det eventuelt substituerte heteroarylet er valgt fra et eventuelt substituert pyridinyl, eventuelt substituert pyrazolyl eller eventuelt substituert indazolyl.

5 **6.** Forbindelsen ifølge et hvilket som helst av kravene 1–5, eller et farmasøytisk akseptabelt salt derav, hvori Z er valgt fra gruppen som består av eventuelt substituert -O-heterosyklylalkyl, eventuelt substituert -N(H)-heterosyklylalkyl, eventuelt substituert -N(Me)-heterosyklylalkyl og eventuelt substituert N-festet heterosyklyl.

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7. Forbindelsen ifølge krav 6, eller et farmasøytisk akseptabelt salt derav, hvori heterosyklylalkylgruppen har formelen $-R^c$ -heterosyklyl og R^c er en eventuelt substituert C_1 - C_3 alkylenkjede, eller

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hvor heterosyklylalkylgruppen har formelen $-R^c$ -heterosyklyl og R^c er en eventuelt substituert C_1 alkylenkjede, eller

hvor heterosyklylalkylgruppen har formelen $-R^c$ -heterosyklyl og heterosyklylet er et eventuelt substituert nitrogenholdig 4-, 5-, 6- eller 7-leddet heterosyklyl.

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8. Forbindelsen ifølge krav 6, eller et farmasøytisk akseptabelt salt derav, hvori det eventuelt substituerte N-festede heterosyklylet er et 4-, 5-, 6- eller 7-leddet N-festet heterosyklyl, eller

hvor det eventuelt substituerte N-festede heterosyklylet er et 6-leddet N-festet heterosyklyl, eller

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hvor det eventuelt substituerte N-festede heterosyklylet er et eventuelt substituert piperidin.

9. Forbindelsen ifølge krav 8, eller et farmasøytisk akseptabelt salt derav, hvori det eventuelt substituerte piperidinet er 4-aminopiperidin.

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10. Forbindelsen ifølge et hvilket som helst av kravene 1–9, eller et farmasøytisk akseptabelt salt derav, hvori Y er valgt fra gruppen som består av hydrogen, eventuelt substituert sykloalkyl og eventuelt substituert alkyl.

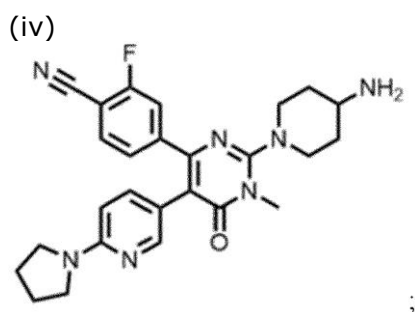
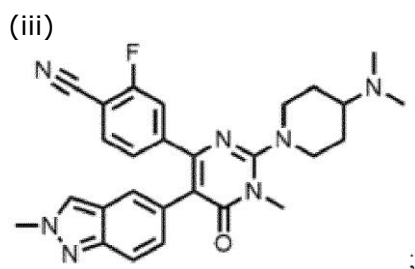
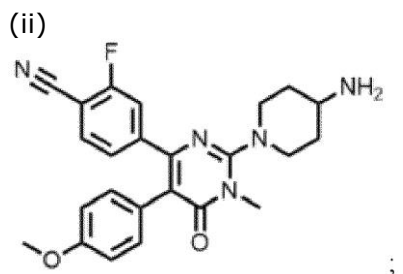
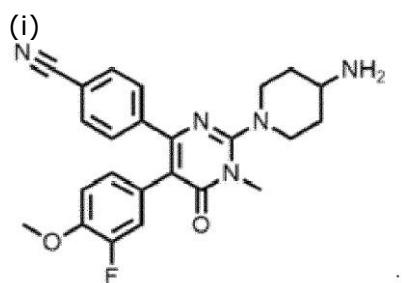
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11. Forbindelsen ifølge krav 10, eller et farmasøytisk akseptabelt salt derav, hvori det eventuelt substituerte alkylet er et eventuelt substituert C₁-C₃alkyl, eller

5 hvori det eventuelt substituerte alkylet er et eventuelt substituert C₁alkyl, eller hvori det eventuelt substituerte alkylet er en metylgruppe.

12. Forbindelsen ifølge krav 1, eller et farmasøytisk akseptabelt salt derav, som har en hvilken som helst av de følgende strukturene:



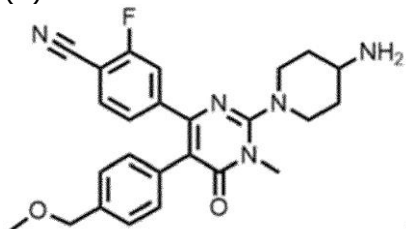
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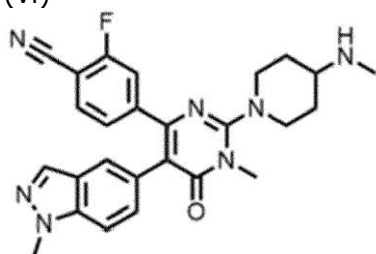
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(v)



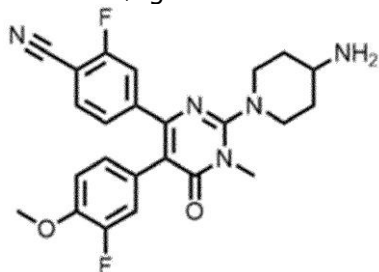
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13. Forbindelsen ifølge krav 1, eller et farmasøytisk akseptabelt salt derav, som har den følgende strukturen:



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14. Forbindelsen ifølge krav 1, eller et farmasøytisk akseptabelt salt derav, som har en hvilken som helst av de følgende strukturene:

4-(2-(4-aminopiperidin-1-yl)-1-metyl-6-okso-5-p-tolyl-1,6-dihydropyrimidin-4-yl)benzonitril

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4-[2-(4-amino-piperidin-1-yl)-5-(4-metoksy-fenyl)-1-metyl-6-okso-1,6-dihydro-pyrimidin-4-yl]-benzonitril

4-[2-(4-amino-piperidin-1-yl)-5-(6-metoksy-pyridin-3-yl)-1-metyl-6-okso-1,6-dihydro-pyrimidin-4-yl]-benzonitril

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- 4-[2-(4-amino-piperidin-1-yl)-1-metyl-5-(6-metyl-pyridin-3-yl)-6-okso-1,6-dihydro-pyrimidin-4-yl]-benzonitril
- 4-[2-(4-amino-piperidin-1-yl)-5-(4-metoksy-fenyl)-1-metyl-6-okso-1,6-dihydro-pyrimidin-4-yl]-benzonitril
- 5 4-[2-(4-amino-piperidin-1-yl)-5-(4-metoksy-fenyl)-1-metyl-6-okso-1,6-dihydro-pyrimidin-4-yl]-2-fluor-benzonitril
- 4-[2-(4-amino-piperidin-1-yl)-5-(6-metoksy-pyridin-3-yl)-1-metyl-6-okso-1,6-dihydro-pyrimidin-4-yl]-2-fluor-benzonitril
- 10 4-[2-(4-amino-piperidin-1-yl)-5-(6-metoksy-pyridin-3-yl)-1-metyl-6-okso-1,6-dihydro-pyrimidin-4-yl]-2-fluor-benzonitril
- 4-[2-(4-amino-piperidin-1-yl)-5-(6-etyl-pyridin-3-yl)-1-metyl-6-okso-1,6-dihydro-pyrimidin-4-yl]-benzonitril
- 2-fluor-4-[5-(4-metoksy-fenyl)-1-metyl-2-(4-metylamino-piperidin-1-yl)-6-okso-1,6-dihydro-pyrimidin-4-yl]-benzonitril
- 15 2-fluor-4-[5-(3-fluor-4-metoksy-fenyl)-1-metyl-2-(4-metylamino-piperidin-1-yl)-6-okso-1,6-dihydro-pyrimidin-4-yl]-benzonitril
- 4-[2-(4-amino-piperidin-1-yl)-1-etyl-6-okso-1,6-dihydro-pyrimidin-4-yl]-2-fluor-benzonitril
- 4-[2-(4-amino-piperidin-1-yl)-5-syklopentyletynyl-1-metyl-6-okso-1,6-dihydro-pyrimidin-4-yl]-2-fluor-benzonitril
- 20 [2-(4-amino-piperidin-1-yl)-4-(4-cyano-3-fluor-fenyl)-5-(4-metoksy-fenyl)-6-okso-6H-pyrimidin-1-yl]-eddiksyre
- 2-[2-(4-amino-piperidin-1-yl)-4-(4-cyano-3-fluor-fenyl)-5-(4-metoksy-fenyl)-6-okso-6H-pyrimidin-1-yl]-acetamid
- 25 4-[2-(4-amino-piperidin-1-yl)-1-(3-hydroksy-propyl)-6-okso-1,6-dihydro-pyrimidin-4-yl]-2-fluor-benzonitril
- 4-[2-(4-amino-piperidin-1-yl)-5-benzofuran-5-yl-1-metyl-6-okso-1,6-dihydro-pyrimidin-4-yl]-2-fluor-benzonitril
- 2-(4-amino-piperidin-1-yl)-4-(4-cyano-3-fluor-fenyl)-1-metyl-6-okso-1,6-dihydro-pyrimidin-5-karbonitril
- 30 4-[2-(4-aminopiperidin-1-yl)-5-klor-1-metyl-6-oksopyrimidin-4-yl]-2-fluorbenzonitril

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- 2-fluor-4-[1-metyl-2-(4-metylamino-piperidin-1-yl)-5-(6-metyl-pyridin-3-yl)-6-okso-1,6-dihydro-pyrimidin-4-yl]-benzonitril
- 4-[2-(2,8-diaza-spiro[4.5]dec-8-yl)-5-(3-fluor-4-metoksy-fenyl)-1-metyl-6-okso-1,6-dihydro-pyrimidin-4-yl]-2-fluor-benzonitril
- 5 4-{2-(4-aminopiperidyl)-1-metyl-6-okso-5-[6-(trifluormetyl)(3-pyridyl)]hydropyrimidin-4-yl}-2-fluorbenzenkarbonitril
- 4-[2-(4-aminopiperidyl)-1-metyl-5-(2-metyl(2H-indazol-5-yl))-6-oksohydropyrimidin-4-yl]benzenkarbonitril
- 10 4-[2-((3R)-3-aminopiperidyl)-5-(3-fluor-4-metoksyfenyl)-1-metyl-6-oksohydropyrimidin-4-yl]-2-fluorbenzenkarbonitril
- 4-[2-(4-aminopiperidyl)-5-(5-fluor-6-metoksy(3-5,6-dihydropyridy1))-1-metyl-6-oksohydropyrimidin-4-yl]-2-fluorbenzenkarbonitril
- 4-[2-((3R)-3-aminopyrrolidiny1)-5-(3-fluor-4-metoksyfenyl)-1-metyl-6-oksohydropyrimidin-4-yl]-2-fluorbenzenkarbonitril
- 15 4-[2-((3S)-3-amino-piperidin-1-yl)-5-(3-fluor-4-metoksy-fenyl)-1-metyl-6-okso-1,6-dihydro-pyrimidin-4-yl]-2-fluor-benzonitril
- 4-[2-((3S)-3-amino-pyrrolidin-1-yl)-5-(3-fluor-4-metoksy-fenyl)-1-metyl-6-okso-1,6-dihydro-pyrimidin-4-yl]-2-fluor-benzonitril
- 4-[2-((3R)-3-aminopiperidyl)-5-(4-metoksyfenyl)-1-metyl-6-oksohydropyrimidin-4-yl]-2-fluorbenzenkarbonitril
- 20 4-[2-((3S)-3-amino-piperidin-1-yl)-5-(4-metoksy-fenyl)-1-metyl-6-okso-1,6-dihydro-pyrimidin-4-yl]-2-fluor-benzonitril
- 4-[2-(4-amino-4-metyl-piperidin-1-yl)-5-(3-fluor-4-metoksy-fenyl)-1-metyl-6-okso-1,6-dihydro-pyrimidin-4-yl]-2-fluor-benzonitril
- 25 4-[2-(4-aminopiperidyl)-1-metyl-5-(1-metyl(1H-indazol-5-yl))-6-oksohydropyrimidin-4-yl]benzenkarbonitril
- 4-{2-(4-amino-piperidin-1-yl)-1-metyl-6-okso-5-[1-(2,2,2-trifluor-etyl)-1H-pyrazol-4-yl]-1,6-dihydro-pyrimidin-4-yl}-2-fluor-benzonitril
- 4-[2-(4-amino-piperidin-1-yl)-1-metyl-5-(1-metyl-1H-indazol-5-yl)-6-okso-1,6-dihydro-pyrimidin-4-yl]-2-fluor-benzonitril
- 30 4-{2-(4-amino-piperidin-1-yl)-1-metyl-6-okso-5-[1-(2,2,2-trifluor-etyl)-1H-pyrazol-4-yl]-1,6-dihydro-pyrimidin-4-yl}-benzonitril

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- 4-[2-(4-aminopiperidyl)-1-metyl-5-(2-metyl(2H-indazol-5-yl))-6-oksohydropyrimidin-4-yl]-2-fluorbenzenkarbonitril
- 4-[2-(4-aminopiperidyl)-5-(3,5-difluor-4-metoksyfenyl)-1-metyl-6-oksohydropyrimidin-4-yl]benzenkarbonitril
- 5 4-[2-(4-aminopiperidyl)-6-(4-cyano-3-fluorfenyl)-3-metyl-4-okso-3-hydropyrimidin-5-yl]benzosyre
- {4-[2-(4-aminopiperidyl)-6-(4-cyanofenyl)-3-metyl-4-okso(3-hydropyrimidin-5-yl)]-2-fluorfenyl}-N-metylkarboksamid
- 4-[2-(4-aminopiperidyl)-6-(4-cyanofenyl)-3-metyl-4-okso(3-hydro pyrimidin-5-yl)]-2-fluorbenzamid
- 10 4-[2-(4-amino-piperidin-1-yl)-1-metyl-6-okso-5-(1-okso-2,3-dihydro-1H-isoindol-5-yl)-1,6-dihydro-pyrimidin-4-yl]-2-fluor-benzonitril
- 3-[2-(4-amino-piperidin-1-yl)-4-(4-cyano-3-fluor-fenyl)-1-metyl-6-okso-1,6-dihydro-pyrimidin-5-yl]-benzosyre
- 15 4-{5-(3-fluor-4-metoksy-fenyl)-1-metyl-6-okso-2-[(3S)-(pyrrolidin-3-ylmetyl)-amino]-1,6-dihydro-pyrimidin-4-yl}-benzonitril
- 4-{5-(3-fluor-4-metoksy-fenyl)-1-metyl-6-okso-2-[(3R)-(pyrrolidin-3-ylmetyl)-amino]-1,6-dihydro-pyrimidin-4-yl}-benzonitril
- 4-[2-[1,4]diazepan-1-yl-5-(3-fluor-4-metoksy-fenyl)-1-metyl-6-okso-1,6-dihydro-pyrimidin-4-yl]-2-fluor-benzonitril
- 20 2-fluor-4-[5-(3-fluor-4-metoksy-fenyl)-1-metyl-6-okso-2-piperazin-1-yl-1,6-dihydro-pyrimidin-4-yl]-benzonitril
- 4-[5-(3-fluor-4-metoksy-fenyl)-1-metyl-6-okso-2-(piperidin-4-ylamino)-1,6-dihydro-pyrimidin-4-yl]-benzonitril
- 25 4-[2-(4-amino-piperidin-1-yl)-2'-dimetylamino-1-metyl-6-okso-1,6-dihydro-[5,5']bipyrimidinyl-4-yl]-2-fluor-benzonitril
- 5-[2-(4-amino-piperidin-1-yl)-4-(4-cyano-3-fluor-fenyl)-1-metyl-6-okso-1,6-dihydro-pyrimidin-5-yl]-pyridin-2-karboksylsyremetylamid
- 2-fluor-4-{5-(4-metoksy-fenyl)-1-metyl-6-okso-2-[(3S)-(pyrrolidin-3-ylmetyl)-amino]-1,6-dihydro-pyrimidin-4-yl}-benzonitril
- 30 2-fluor-4-{5-(4-metoksy-fenyl)-1-metyl-6-okso-2-[(3R)-(pyrrolidin-3-ylmetyl)-amino]-1,6-dihydro-pyrimidin-4-yl}-benzonitril

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- 2-fluor-4-[5-(4-metoksy-fenyl)-1-metyl-6-okso-2-(piperidin-4-ylamino)-1,6-dihydro-pyrimidin-4-yl]-benzonitril
- 2-fluor-4-[5-(4-metoksy-fenyl)-1-metyl-2-(metyl-(3S)-pyrrolidin-3-ylmetyl-amino)-6-okso-1,6-dihydro-pyrimidin-4-yl]-benzonitril
- 5 2-fluor-4-[5-(4-metoksy-fenyl)-1-metyl-2-(metyl-piperidin-4-yl-amino)-6-okso-1,6-dihydro-pyrimidin-4-yl]-benzonitril
- 2-fluor-4-[5-(4-metoksy-fenyl)-1-metyl-2-(metyl-pyrrolidin-3-ylmetyl-amino)-6-okso-1,6-dihydro-pyrimidin-4-yl]-benzonitril
- 10 4-[2-(4-amino-piperidin-1-yl)-5-(6-dimetylamino-pyridin-3-yl)-1-metyl-6-okso-1,6-dihydro-pyrimidin-4-yl]-2-fluor-benzonitril
- 2-fluor-4-[5-(6-metoksy-pyridin-3-yl)-1-metyl-2-(4-metylamino-piperidin-1-yl)-6-okso-1,6-dihydro-pyrimidin-4-yl]-benzonitril
- 4-[2-(4-amino-piperidin-1-yl)-5-(4-dimetylamino-fenyl)-1-metyl-6-okso-1,6-dihydro-pyrimidin-4-yl]-2-fluor-benzonitril
- 15 4-[2-(4-amino-piperidin-1-yl)-1-metyl-6-okso-5-(6-pyrrolidin-1-yl-pyridin-3-yl)-1,6-dihydro-pyrimidin-4-yl]-2-fluor-benzonitril
- 4-[2-[1,4]diazepan-1-yl-5-(6-metoksy-pyridin-3-yl)-1-metyl-6-okso-1,6-dihydro-pyrimidin-4-yl]-2-fluor-benzonitril
- 4-[2-[1,4]diazepan-1-yl-5-(6-metoksy-pyridin-3-yl)-1-metyl-6-okso-1,6-dihydro-pyrimidin-4-yl]-2-fluor-benzonitril
- 20 4-[2-[1,4]diazepan-1-yl-5-(6-dimetylamino-pyridin-3-yl)-1-metyl-6-okso-1,6-dihydro-pyrimidin-4-yl]-2-fluor-benzonitril
- 4-[2-(3-amino-azetidin-1-yl)-5-(4-metoksy-fenyl)-1-metyl-6-okso-1,6-dihydro-pyrimidin-4-yl]-2-fluor-benzonitril
- 25 2-fluor-4-[1-metyl-2-(4-metylamino-piperidin-1-yl)-5-(2-metyl-2H-indazol-5-yl)-6-okso-1,6-dihydro-pyrimidin-4-yl]-benzonitril
- 4-[2-[1,4]diazepan-1-yl-1-metyl-5-(2-metyl-2H-indazol-5-yl)-6-okso-1,6-dihydro-pyrimidin-4-yl]-2-fluor-benzonitril
- 4-[2-[1,4]diazepan-1-yl-5-(6-dimetylamino-pyridin-3-yl)-1-metyl-6-okso-1,6-dihydro-pyrimidin-4-yl]-benzonitril
- 30 4-[2-(4-amino-piperidin-1-yl)-1-metyl-5-(6-morfolin-4-yl-pyridin-3-yl)-6-okso-1,6-dihydro-pyrimidin-4-yl]-2-fluor-benzonitril

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- 4-[2-(3-aminometyl-azetidin-1-yl)-5-(4-metoksy-fenyl)-1-metyl-6-okso-1,6-dihydro-pyrimidin-4-yl]-2-fluor-benzonitril
2-fluor-4-[5-(4-metoksy-fenyl)-1-metyl-2-(3-metylaminometyl-azetidin-1-yl)-6-okso-1,6-dihydro-pyrimidin-4-yl]-benzonitril
- 5 4-[2-(4-dimetylamino-piperidin-1-yl)-1-metyl-5-(2-metyl-2H-indazol-5-yl)-6-okso-1,6-dihydro-pyrimidin-4-yl]-2-fluor-benzonitril
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- 10 4-[2-(4-amino-piperidin-1-yl)-5-(1H-indol-5-yl)-1-metyl-6-okso-1,6-dihydro-pyrimidin-4-yl]-2-fluor-benzonitril
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4-[2-(4-amino-piperidin-1-yl)-5-(1H-indol-6-yl)-1-metyl-6-okso-1,6-dihydro-pyrimidin-4-yl]-2-fluor-benzonitril
- 15 4-[2-(4-amino-piperidin-1-yl)-1-metyl-5-(1-metyl-1H-indol-6-yl)-6-okso-1,6-dihydro-pyrimidin-4-yl]-2-fluor-benzonitril
4-[2-(4-amino-piperidin-1-yl)-5-(1H-indazol-6-yl)-1-metyl-6-okso-1,6-dihydro-pyrimidin-4-yl]-2-fluor-benzonitril
- 20 4-[2-((4R, 3S)-4-amino-3-fluor-piperidin-1-yl)-5-(4-metoksy-fenyl)-1-metyl-6-okso-1,6-dihydro-pyrimidin-4-yl]-2-fluor-benzonitril
4-[2-((4S, 3R)-4-amino-3-fluor-piperidin-1-yl)-5-(4-metoksy-fenyl)-1-metyl-6-okso-1,6-dihydro-pyrimidin-4-yl]-2-fluor-benzonitril
4-[2-(4-dimetylamino-piperidin-1-yl)-1-metyl-5-(2-metyl-2H-indazol-6-yl)-6-okso-1,6-dihydro-pyrimidin-4-yl]-2-fluor-benzonitril
- 25 4-[2'-dimetylamino-2-(4-dimetylamino-piperidin-1-yl)-1-metyl-6-okso-1,6-dihydro-[5,5']bipyrimidinyl-4-yl]-2-fluor-benzonitril
4-[2-(4-dimetylamino-piperidin-1-yl)-1-metyl-5-(6-metyl-pyridin-3-yl)-6-okso-1,6-dihydro-pyrimidin-4-yl]-2-fluor-benzonitril
- 30 4-[5-(6-dimetylamino-pyridin-3-yl)-1-metyl-2-(4-metylamino-piperidin-1-yl)-6-okso-1,6-dihydro-pyrimidin-4-yl]-2-fluor-benzonitril
4-[2-(4-dimetylamino-piperidin-1-yl)-5-(2H-indazol-6-yl)-1-metyl-6-okso-1,6-dihydro-pyrimidin-4-yl]-2-fluor-benzonitril

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- 4-[2-(4-amino-piperidin-1-yl)-5-(3-fluor-4-metoksy-fenyl)-1-deuterert metyl-6-okso-1,6-dihydro-pyrimidin-4-yl]-2-fluor-benzonitril
- 4-[2-(4-amino-piperidin-1-yl)-5-(3-fluor-4-deuterert metoksy-fenyl)-1-metyl-6-okso-1,6-dihydro-pyrimidin-4-yl]-2-fluor-benzonitril
- 5 2-fluor-4-[1-metyl-2-[4-(metylamino)piperidin-1-yl]-5-(1-metylindazol-5-yl)-6-okso-pyrimidin-4-yl]benzonitril
- 4-[2-(4-aminopiperidin-1-yl)-5-(1H-indazol-5-yl)-1-metyl-6-okso-pyrimidin-4-yl]-2-fluorbenzonitril
- 4-[5-(4-aminofenyl)-2-(4-aminopiperidin-1-yl)-1-metyl-6-okso-pyrimidin-4-yl]-2-fluorbenzonitril
- 10 4-[2-(4-aminopiperidin-1-yl)-1-metyl-5-[4-(metylamino)fenyl]-6-okso-pyrimidin-4-yl]-2-fluorbenzonitril
- 4-[2-(4-aminopiperidin-1-yl)-5-[3-fluor-4-(metylamino)fenyl]-1-metyl-6-okso-pyrimidin-4-yl]-2-fluorbenzonitril
- 15 4-[2-[4-(dimetylamino)piperidin-1-yl]-5-(6-metoksypyridin-3-yl)-1-metyl-6-okso-pyrimidin-4-yl]-2-fluorbenzonitril
- 4-[2-(4-aminopiperidin-1-yl)-5-(6-etoksy-5-fluorpyridin-3-yl)-1-metyl-6-okso-pyrimidin-4-yl]-2-fluorbenzonitril
- 4-[2-(4-aminopiperidin-1-yl)-5-(6-etoksypyridin-3-yl)-1-metyl-6-okso-pyrimidin-4-yl]-2-fluorbenzonitril
- 20 4-[2-(4-aminopiperidin-1-yl)-5-(4-etoksyfenyl)-1-metyl-6-okso-pyrimidin-4-yl]-2-fluorbenzonitril
- 4-[2-(4-aminopiperidin-1-yl)-5-[4-(2-hidroksyetoksy)fenyl]-1-metyl-6-okso-pyrimidin-4-yl]-2-fluorbenzonitril
- 25 4-[2-(4-aminopiperidin-1-yl)-5-[4-(2-hidroksyetoksy)fenyl]-1-metyl-6-okso-pyrimidin-4-yl]benzonitril
- 4-[2-(4-aminopiperidin-1-yl)-5-[4-(2-metoksyetoksy)fenyl]-1-metyl-6-okso-pyrimidin-4-yl]-2-fluorbenzonitril
- 4-[2-(4-aminopiperidin-1-yl)-5-[4-(2-hidroksyetyl)fenyl]-1-metyl-6-okso-pyrimidin-4-yl]-2-fluorbenzonitril
- 30 4-[2-(4-aminopiperidin-1-yl)-5-[4-(hidroksymetyl)fenyl]-1-metyl-6-okso-pyrimidin-4-yl]-2-fluorbenzonitril

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4-[2-(4-aminopiperidin-1-yl)-5-(4-fluorfenyl)-1-metyl-6-oksopyrimidin-4-yl]-2-fluorbenzonitril

4-[2-(4-aminopiperidin-1-yl)-5-(3-fluorfenyl)-1-metyl-6-oksopyrimidin-4-yl]-2-fluorbenzonitril

5 4-[2-(4-aminopiperidin-1-yl)-5-(3,5-difluorfenyl)-1-metyl-6-oksopyrimidin-4-yl]-2-fluorbenzonitril

4-[2-(4-aminopiperidin-1-yl)-5-(3,4-difluorfenyl)-1-metyl-6-oksopyrimidin-4-yl]-2-fluorbenzonitril

10 4-[2-(4-aminopiperidin-1-yl)-1-metyl-5-(4-metylsulfonylfenyl)-6-oksopyrimidin-4-yl]-2-fluorbenzonitril

4-[2-(4-aminopiperidin-1-yl)-5-(4-klorfenyl)-1-metyl-6-oksopyrimidin-4-yl]-2-fluorbenzonitril

4-[2-(4-aminopiperidin-1-yl)-5-[4-(metoksymetyl)fenyl]-1-metyl-6-oksopyrimidin-4-yl]-2-fluorbenzonitril

15 4-[2-(4-aminopiperidin-1-yl)-1-metyl-6-oksopyrimidin-4-yl]-2-fluorbenzonitril

4-[2-(4-amino-piperidin-1-yl)-1-syklopropylmetyl-6-okso-1,6-dihydro-pyrimidin-4-yl]-2-fluor-benzonitril

4-[2-(4-amino-piperidin-1-yl)-1-syklopropylmetyl-6-okso-1,6-dihydro-pyrimidin-4-yl]-2-fluor-benzonitril

20 2-(4-amino-piperidin-1-yl)-4-(4-cyano-3-fluor-fenyl)-1 -metyl-6-okso-1,6-dihydro-pyrimidin-5-karbonitril

4-[2-(4-aminopiperidin-1-yl)-5-(4-metoksyfenyl)-6-okso-1H-pyrimidin-4-yl]-2-fluorbenzonitril

eller farmasøytisk akseptabelt salt derav.

25

15. Forbindelsen ifølge krav 1, eller et farmasøytisk akseptabelt salt derav, som har den følgende strukturen:

4-[2-(4-amino-piperidin-1-yl)-5-(3-fluor-4-metoksy-fenyl)-1-metyl-6-okso-1,6-dihydro-pyrimidin-4-yl]-2-fluor-benzonitril.

30

16. Farmasøytisk sammensetning omfattende en forbindelse av formel (I), ifølge krav 1, eller et farmasøytisk akseptabelt salt derav, og en farmasøytisk

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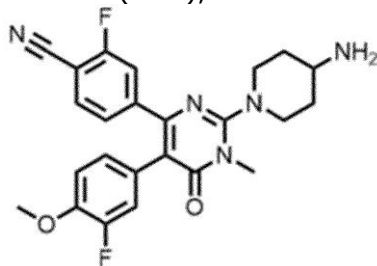
akseptabel eksipiens.

5 **17.** Forbindelsen av formel (I) eller et farmasøytisk akseptabelt salt derav, eller den farmasøytiske sammensetningen ifølge krav 16 for anvendelse som et medikament.

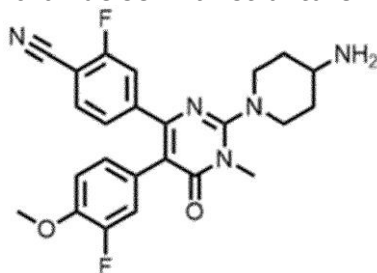
10 **18.** Forbindelsen av formel (I) eller et farmasøytisk akseptabelt salt derav, eller den farmasøytiske sammensetningen ifølge krav 16 for anvendelse som et medikament for behandling av kreft.

19. Forbindelsen eller et farmasøytisk akseptabelt salt derav, for anvendelse ifølge krav 18, hvori kreften er akutt myelogen leukemi (AML), prostatakreft og brystkreft.

15 **20.** Forbindelse av formel (I), ifølge krav 1 eller et farmasøytisk akseptabelt salt derav, for anvendelse som et medikament for behandling av akutt myelogen leukemi (AML), hvori forbindelsen har strukturen til:



20 **21.** Forbindelse av formel (I), ifølge krav 1 eller et farmasøytisk akseptabelt salt derav, for anvendelse som et medikament for behandling av prostatakreft hvori forbindelsen har strukturen til:



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22. Forbindelse av formel (I), ifølge krav 1 eller et farmasøytisk akseptabelt salt derav, for anvendelse som et medikament for behandling av brystkreft hvori forbindelsen har strukturen til:

