



(12) Translation of
European patent specification

(11) NO/EP 4209510 B1

NORWAY

(19) NO
(51) Int Cl.
C07K 16/28 (2006.01)
A61K 39/395 (2006.01)
A61P 35/00 (2006.01)

Norwegian Industrial Property Office

(45)	Translation Published	2024.04.29
(80)	Date of The European Patent Office Publication of the Granted Patent	2024.01.31
(86)	European Application Nr.	22215991.5
(86)	European Filing Date	2009.12.08
(87)	The European Application's Publication Date	2023.07.12
(30)	Priority	2008.12.09, US, 121092 P
(84)	Designated Contracting States:	AT ; BE ; BG ; CH ; CY ; CZ ; DE ; DK ; EE ; ES ; FI ; FR ; GB ; GR ; HR ; HU ; IE ; IS ; IT ; LI ; LT ; LU ; LV ; MC ; MK ; MT ; NL ; NO ; PL ; PT ; RO ; SE ; SI ; SK ; SM ; TR
(73)	Proprietor	F. Hoffmann-La Roche AG, Grenzacherstrasse 124, 4070 Basel, Sveits
(72)	Inventor	IRVING, Bryan, San Francisco, 94107, USA CHEUNG, Jeanne, San Francisco, 94158, USA CHIU, Henry, San Francisco, 94116, USA LEHAR, Sophie M., Montara, 94037, USA MAECKER, Heather, South San Francisco, 94080-4990, USA MARIATHASAN, Sanjeev, Millbrae, 94030, USA WU, Yan, Foster City, 94404, USA
(74)	Agent or Attorney	BRYN AARFLOT AS, Stortingsgata 8, 0161 OSLO, Norge

(54) Title **ANTI-PD-L1 ANTIBODIES AND THEIR USE TO ENHANCE T-CELL FUNCTION**

(56) References
Cited: EP-A1- 1 537 878, WO-A2-2006/042237, WO-A2-2007/005874, WO-A2-2008/071447,
WO-A2-2008/085562
US-A1- 2003 039 653
HIRANO FUMIYA ET AL: "Blockade of B7-H1 and PD-1 by monoclonal antibodies potentiates
cancer therapeutic immunity", CANCER RESEARCH, AMERICAN ASSOCIATION FOR
CANCER REREARCH, US, vol. 65, no. 3, 1 February 2005 (2005-02-01), pages 1089-1096,
XP002419626, ISSN: 0008-5472
DONG HAIDONG ET AL: "Tumor-associated B7-H1 promotes T-cell apoptosis: a potential
mechanism of immune evasion", NATURE MEDICINE, NATURE PUBLISHING GROUP, NEW
YORK, NY, US, vol. 8, no. 8, 24 June 2002 (2002-06-24), pages 793-800, XP002397368, ISSN:
1078-8956
BARBER DANIEL L ET AL: "Restoring function in exhausted CD8 T cells during chronic viral
infection", NATURE, NATURE PUBLISHING GROUP, LONDON, GB LNKD-
DOI:10.1038/NATURE04444, vol. 439, no. 7077, 9 February 2006 (2006-02-09), pages 682-687,
XP002419629, ISSN: 0028-0836
LATCHMAN YVETTE ET AL: "PD-L2 is a second ligand for PD-1 and inhibits T cell activation",
NATURE IMMUNOLOGY, NATURE PUBLISHING GROUP, GB LNKD- DOI:10.1038/85330, vol.
2, no. 3, 1 March 2001 (2001-03-01), pages 261-268, XP001064842, ISSN: 1529-2908

Enclosed is a translation of the patent claims in Norwegian. Please note that as per the Norwegian Patents Acts, section 66i the patent will receive protection in Norway only as far as there is agreement between the translation and the language of the application/patent granted at the EPO. In matters concerning the validity of the patent, language of the application/patent granted at the EPO will be used as the basis for the decision. The patent documents published by the EPO are available through Espacenet (<http://worldwide.espacenet.com>) or via the search engine on our website here: <https://search.patentstyret.no/>

Patentkrav

1. Et isolert, blokkerende anti-PD-L1 antistoff full-lengde som omfatter en tung kjede og en lett kjede variabel regionsekvens og en konstant region, hvori:

(a) den tunge kjeden omfatter sekvensen:

EVQLVESGGGLVQPGGSLRLSCAASGFTFSDSWIHVVRQAPGKGLEWVAWISPYGGSTYYADSV
KGRFTISADTSKNTAYLQMNSLRAEDTAVYYCARRHWPGGFDYWGQGTLVTVSA (SEQ ID
NO:20),

og

(b) den lette kjeden omfatter sekvensen:

DIQMTQSPSSLSASVGDRVTITCRASQDVSTAVAWYQQKPGKAPKLLIYSASFLYSGVPSRFSGSGS
GTDFTLTISLQPEDFATYYCQYLYHPATFGQGTKVEIKR (SEQ ID NO:21)

og den konstante regionen er en human IgG1 konstant region.

2. En sammensetning omfattende det isolerte, blokkerende anti-PD-L1 full-lengde antistoffet ifølge krav 1 og minst én farmasøytisk akseptabel bærer.