

Title (en)  
ANTI-HER2 ANTIBODY OR ANTIGEN-BINDING FRAGMENT THEREOF, AND CHIMERIC ANTIGEN RECEPTOR COMPRISING SAME

Title (de)  
ANTI-HER2-ANTIKÖRPER ODER ANTIGENBINDENDES FRAGMENT DAVON UND CHIMÄRER ANTIGENREZEPTOR DAMIT

Title (fr)  
ANTICORPS ANTI-HER2 OU FRAGMENT DE LIAISON À L'ANTIGÈNE DE CELUI-CI, ET RÉCEPTEUR ANTIGÉNIQUE CHIMÉRIQUE LE COMPRENANT

Publication  
**EP 4153635 A4 20240626 (EN)**

Application  
**EP 21809551 A 20210521**

Priority  
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Abstract (en)  
[origin: WO2021235894A1] The present disclosure relates to a novel anti-HER2 antibody or an antigen-binding fragment thereof used in the prevention or treatment of cancer, a chimeric antigen receptor including the same, and uses thereof. The antibody of the present disclosure is an antibody that specifically binds to HER2 which is highly expressed in cancer cells (particularly, breast cancer or gastric cancer cells), and binds to an epitope that is different from an epitope to which trastuzumab binds.

IPC 8 full level  
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CPC (source: EP IL KR US)  
**A61K 35/17** (2013.01 - KR); **A61K 38/00** (2013.01 - IL); **A61K 39/4613** (2023.05 - EP IL US); **A61K 39/4631** (2023.05 - EP IL US); **A61K 39/464406** (2023.05 - EP IL US); **A61K 2239/31** (2023.05 - US); **A61K 2239/38** (2023.05 - US); **A61K 2239/53** (2023.05 - US); **A61P 35/00** (2018.01 - EP IL KR); **C07K 14/4748** (2013.01 - EP IL); **C07K 14/7051** (2013.01 - KR); **C07K 14/70517** (2013.01 - KR); **C07K 14/70521** (2013.01 - KR); **C07K 14/70575** (2013.01 - KR); **C07K 14/70578** (2013.01 - KR); **C07K 14/71** (2013.01 - EP IL); **C07K 16/32** (2013.01 - EP IL KR); **C12N 5/0646** (2013.01 - EP IL KR US); **A61K 38/00** (2013.01 - EP); **A61K 2239/31** (2023.05 - EP IL); **A61K 2239/38** (2023.05 - EP IL); **A61K 2239/53** (2023.05 - EP IL); **C07K 2317/565** (2013.01 - EP IL KR); **C07K 2317/622** (2013.01 - EP IL KR); **C07K 2317/73** (2013.01 - EP IL KR); **C07K 2317/92** (2013.01 - EP IL KR); **C07K 2319/03** (2013.01 - EP IL KR); **C07K 2319/33** (2013.01 - EP IL KR); **C12N 2510/00** (2013.01 - KR)

Citation (search report)  
• [Y] WO 2020096646 A1 20200514 - NANTKWEST INC [US]  
• [Y] WO 2017079694 A2 20170511 - PRICEMAN SAUL J [US], et al  
• [Y] KRUSCHINSKI ANNA ET AL: "Engineering antigen-specific primary human NK cells against HER-2 positive carcinomas", PROCEEDINGS OF THE NATIONAL ACADEMY OF SCIENCES, vol. 105, no. 45, 11 November 2008 (2008-11-11), pages 17481 - 17486, XP055911709, ISSN: 0027-8424, DOI: 10.1073/pnas.0804788105  
• [Y] KURT SCHÖNFELD ET AL: "Selective Inhibition of Tumor Growth by Clonal NK Cells Expressing an ErbB2/HER2-Specific Chimeric Antigen Receptor", MOLECULAR THERAPY, vol. 23, no. 2, 6 November 2014 (2014-11-06), US, pages 330 - 338, XP055265087, ISSN: 1525-0016, DOI: 10.1038/mt.2014.219  
• [Y] CONGCONG ZHANG: "ErbB2/HER2-Specific NK Cells for Targeted Therapy of Glioblastoma", JOURNAL OF THE NATIONAL CANCER INSTITUTE, vol. 108, no. 5, 6 December 2015 (2015-12-06), GB, XP093160504, ISSN: 0027-8874, DOI: 10.1093/jnci/djv375  
• [Y] XIANQIANG LIU ET AL: "Driving better and safer HER2-specific CARs for cancer therapy", ONCOTARGET, vol. 8, no. 37, 5 September 2017 (2017-09-05), pages 62730 - 62741, XP055546086, DOI: 10.18632/oncotarget.17528  
• [Y] DANIEL ABATE-DAGA ET AL: "CAR models: next-generation CAR modifications for enhanced T-cell function", MOLECULAR THERAPY - ONCOLYTICS, vol. 3, 1 January 2016 (2016-01-01), pages 16014, XP055564170, ISSN: 2372-7705, DOI: 10.1038/mto.2016.14  
• [Y] SARWISH RAFIQ: "Engineering strategies to overcome the current roadblocks in CAR T cell therapy", NATURE REVIEWS CLINICAL ONCOLOGY, vol. 17, no. 3, 1 March 2020 (2020-03-01), NY, US, pages 147 - 167, XP093155916, ISSN: 1759-4774, Retrieved from the Internet <URL:https://www.nature.com/articles/s41571-019-0297-y.pdf> DOI: 10.1038/s41571-019-0297-y  
• See also references of WO 2021235894A1

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