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(54) **ANTIBODIES SELECTIVE FOR CELLS PRESENTING EGFR AT HIGH DENSITY**

FÜR ZELLEN MIT EGFR BEI HOHER DICHT SELEKTIVE ANTIKÖRPER

ANTICORPS SÉLECTIFS DES CELLULES PRÉSENTATRICES DES RÉCEPTEURS DE EGF À
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(56) References cited:
WO-A1-96/40210 WO-A2-2008/104183

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- Ilia A. Tikhomirov ET AL: "Binding Properties of Epidermal Growth Factor Receptor (EGFR) Targeted Monoclonal Antibodies: Factors Contributing to Differences in Observed Clinical Profiles (A36)", AACR Cancer Clinical Trials and Personalized Medicine, 1 August 2008 (2008-08-01), XP055197559, Retrieved from the Internet:
URL: http://ymbiosciences.q4web.com/files/doc_downloads/Nimotuzumab/poster_nimo_AACR_Translational_Med_2008_v001_q194wg.pdf [retrieved on 2015-06-23]
- MELARKODE RAMAKRISHNAN ET AL: "Nimotuzumab, a promising therapeutic monoclonal for treatment of tumors of epithelial origin", MABS, 1 January 2009 (2009-01-01), pages 41-48, XP055173443,
- A. TALAVERA ET AL: "Nimotuzumab, an Antitumor Antibody that Targets the Epidermal Growth Factor Receptor, Blocks Ligand Binding while Permitting the Active Receptor Conformation", CANCER RESEARCH, vol. 69, no. 14, 15 July 2009 (2009-07-15), pages 5851-5859, XP055197598, ISSN: 0008-5472, DOI: 10.1158/0008-5472.CAN-08-4518
- ARLHEE DIAZ MIQUELI ET AL: "Biological Activity In Vitro of Anti-Epidermal Growth Factor Receptor Monoclonal Antibodies with Different Affinities", HYBRIDOMA, vol. 26, no. 6, 1 December 2007 (2007-12-01), pages 423-432, XP055197602, ISSN: 1554-0014, DOI: 10.1089/hyb.2007.0516
- CROMBET T ET AL: "Use of the Humanized Anti-Epidermal Growth Factor Receptor Monoclonal Antibody h-R3 in Combination with Advanced Head and Neck Cancer Patients", JOURNAL OF CLINICAL ONCOLOGY, AMERICAN SOCIETY OF CLINICAL ONCOLOGY, US, vol. 22, no. 9, 1 May 2004 (2004-05-01), pages 1646-1654, XP008131473, ISSN: 0732-183X, DOI: 10.1200/JCO.2004.03.089
- STEPHEN I. RUDNICK ET AL: "Affinity and Avidity in Antibody-Based Tumor Targeting", CANCER BIOTHERAPY & RADIOPHARMACEUTICALS, vol. 24, no. 2, 1 April 2009 (2009-04-01), pages 155-161, XP055069540, ISSN: 1084-9785, DOI: 10.1089/cbr.2009.0627
- MASAYUKI ODA ET AL: "Reevaluation of stoichiometry and affinity/avidity in interactions between anti-hapten antibodies and mono- or multi-valent antigens", MOLECULAR IMMUNOLOGY, vol. 37, no. 18, 1 December 2000 (2000-12-01), pages 1111-1122, XP055197715, ISSN: 0161-5890, DOI: 10.1016/S0161-5890(01)00028-1
- GRETA GARRIDO ET AL: "Bivalent binding by intermediate affinity of nimotuzumab: A contribution to explain antibody clinical profile", CANCER BIOLOGY & THERAPY, vol. 11, no. 4, 15 February 2011 (2011-02-15), pages 373-382, XP055197571, ISSN: 1538-4047, DOI: 10.4161/cbt.11.4.14097
- BOLAND, W ET AL.: 'The Emerging Role Of Nimotuzumab In The Treatment Of Non-Small Cell Lung Cancer.' BIOLOGICS vol. 4, 09 November 2010, pages 289 - 298, XP055115351
- DONALDSON, J. M. ET AL.: 'Design And Development Of Masked Therapeutic Antibodies To Limit Off- Target Effects: Application To Anti-EGFR Antibodies.' CANCER BIOL THER vol. 8, November 2009, pages 2147 - 2152, XP009135774