

(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property Organization
International Bureau



(43) International Publication Date
30 December 2009 (30.12.2009)

PCT

(10) International Publication Number
WO 2009/157771 A3

(51) International Patent Classification:

A01K 67/027 (2006.01) *C07K 16/00* (2006.01)
C12N 15/85 (2006.01) *C12N 5/10* (2006.01)

(21) International Application Number:

PCT/NL2009/050381

(22) International Filing Date:

29 June 2009 (29.06.2009)

(25) Filing Language:

English

(26) Publication Language:

English

(30) Priority Data:

PCT/NL2008/050430 27 June 2008 (27.06.2008) NL

(71) Applicant (for all designated States except US): **MERUS B.V.** [NL/NL]; Uppsalalaan 8, NL-3584 CT Utrecht (NL).

(72) Inventors; and

(75) Inventors/Applicants (for US only): **HOUTZAGER, Erwin** [NL/NL]; van Reenenweg 37, NL-3702 SC Zeist (NL). **PINTO, Rui Daniel** [FR/NL]; Prinsenstraat 12, NL-3581 JS Utrecht (NL). **LOGTENBERG, Ton** [NL/NL]; Koningin Wilhelminalaan 22, NL-3972 EX Driebergen (NL). **THROSBY, Mark** [AU/NL]; Kerkstraat 37, NL-3581 RB Utrecht (NL). **KRAMER, Robert, Arjen**; Lombardije 15, NL-3524 KV Utrecht (NL). **DE KRUIF, Cornelis, Adriaan**; Westerlaan 40, NL-3731 EL De Bilt (NL).

(74) Agent: **HATZMANN, M.J.**; Vereenigde, Johan de Wittlaan 7, NL-2517 JR Den Haag (NL).

(81) Designated States (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM, AO, AT, AU, AZ, BA, BB, BG, BH, BR, BW, BY, BZ, CA, CH, CL, CN, CO, CR, CU, CZ, DE, DK, DM, DO, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GT, HN, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR, KZ, LA, LC, LK, LR, LS, LT, LU, LY, MA, MD, ME, MG, MK, MN, MW, MX, MY, MZ, NA, NG, NI, NO, NZ, OM, PE, PG, PH, PL, PT, RO, RS, RU, SC, SD, SE, SG, SK, SL, SM, ST, SV, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, ZA, ZM, ZW.

(84) Designated States (unless otherwise indicated, for every kind of regional protection available): ARIPO (BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HR, HU, IE, IS, IT, LT, LU, LV, MC, MK, MT, NL, NO, PL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

Published:

- with international search report (Art. 21(3))
- before the expiration of the time limit for amending the claims and to be republished in the event of receipt of amendments (Rule 48.2(h))

(88) Date of publication of the international search report:

18 February 2010

(54) Title: ANTIBODY PRODUCING NON-HUMAN MAMMALS

(57) Abstract: The invention provides transgenic, non-human animals comprising a nucleic acid encoding an immunoglobulin light chain, whereby the immunoglobulin light chain is human, human-like, or humanized. The nucleic acid is provided with a means that renders it resistant to DNA rearrangements and/or somatic hypermutations. In one embodiment, the nucleic acid comprises an expression cassette for the expression of a desired molecule in cells during a certain stage of development in cells developing into mature B cells. The invention further provides methods for producing an immunoglobulin from the transgenic, non-human animal.



WO 2009/157771 A3