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

(19) World Intellectual Property Organization
International Bureau

(43) International Publication Date
12 November 2009 (12.11.2009)

PCT

(10) International Publication Number
WO 2009/136382 A3

(51) International Patent Classification:
C12N 15/12 (2006.01) *C12N 7/00* (2006.01)
C12N 5/00 (2006.01)

(21) International Application Number:
PCT/IB2009/051915

(22) International Filing Date:
8 May 2009 (08.05.2009)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
61/051,863 9 May 2008 (09.05.2008) US
61/093,416 1 September 2008 (01.09.2008) US

(71) Applicants *(for all designated States except US)*: **ABBOTT GMBH & CO. KG** [DE/DE]; Max-Planck-Ring 2, 65205 Wiesbaden (DE). **Abbott Laboratories** [US/US]; 100 Abbott Park Road, Abbott Park, Illinois 60064 (US).

(72) Inventors; and

(75) Inventors/Applicants *(for US only)*: **GU, Jijie** [US/US]; 12 Tern Drive, Shrewsbury, Massachusetts 01545 (US). **HSIEH, Chung-Ming** [US/US]; 22 Olde Field Road, Newton, Massachusetts 02459 (US). **WU, Zhen** [CN/US]; 78 Angelica Drive, Framingham, Massachusetts 01701 (US). **DIGIAMMARINO, Enrico L.** [US/US]; 161 Rose Tree Lane, Lindenhurst, Illinois 60046 (US). **LUO, Feng** [CN/US]; 1104 East Oxford Lane, Arlington Heights, Illinois 60004 (US). **FOX, Gerard B.** [US/US]; 334 Old Sutton Road, Barrington Hills, Illinois 60010 (US). **HARLAN, John E.** [US/US]; 689 Portree Lane, Lake Zurich, Illinois 60047 (US). **SCHMIDT, Martin** [DE/DE]; Mittelstraße 49B, 64625 Bensheim (DE). **LOEBBERT, Ralf** [DE/DE]; Hermann-Langlotz-Straße 17, 67346 Speyer (DE). **MUELLER, Reinhold** [DE/DE]; Ostring 66 A, 67105 Schifferstadt (DE). **EBERT, Ulrich** [DE/DE]; Königstuhlstraße 6, 68163 Mannheim (DE). **NIMMRICH, Volker** [DE/DE]; Brückenstraße 8, 69120 Heidelberg (DE).

(74) Agent: **Patentanwälte Reitstötter Kinzebach**; Sternwartstr. 4, 81679 München (DE).

(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, 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, 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))*

— *with sequence listing part of description (Rule 5.2(a))*

(88) Date of publication of the international search report:
25 March 2010

(54) Title: ANTIBODIES TO RECEPTOR OF ADVANCED GLYCATION END PRODUCTS (RAGE) AND USES THEREOF

(57) Abstract: The present application relates to isolated proteins, particularly monoclonal antibodies, in particular CDR-grafted, humanized antibodies which bind to RAGE protein. Specifically, these antibodies have the ability to inhibit the binding of RAGE to its various ligands. The antibodies or portions thereof of described in the present application are useful for treating a disease or disorder characterized by or induced by pathophysiological ligands of RAGE, for example missfolded proteins like amyloid β and advanced glycation-end-products.

WO 2009/136382 A3