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

(19) World Intellectual Property Organization
International Bureau

(43) International Publication Date
25 September 2014 (25.09.2014)

WIPO | PCT

(10) International Publication Number
WO 2014/151644 A2

(51) International Patent Classification:
C07K 16/24 (2006.01)

(21) International Application Number:
PCT/US2014/026159

(22) International Filing Date:
13 March 2014 (13.03.2014)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
61/794,576 15 March 2013 (15.03.2013) US

(71) Applicant: **GENZYME CORPORATION** [US/US]; 500 Kendall Square, Cambridge, MA 02142 (US).

(72) Inventors: **QIU, Huawei**; c/o Sanofi US, 55 Corporate Drive - Mail Code: 55A-505A, Bridgewater, NJ 08807 (US). **WEI, Ronnie, Rong**; c/o Sanofi US, 55 Corporate Drive - Mail Code: 55A-505A, Bridgewater, NJ 08807 (US). **PAN, Clark, Qun**; c/o Sanofi US, 55 Corporate Drive - Mail Code: 55A-505A, Bridgewater, NJ 08807 (US). **SENDAK, Rebecca**; c/o Sanofi US, 55 Corporate Drive - Mail Code: 55A-505A, Bridgewater, NJ 08807 (US).

(74) Agents: **GUNNISON, Jane T.** et al.; Ropes & Gray LLP, 1211 Avenue Of The Americas, New York, NY 10036 (US).

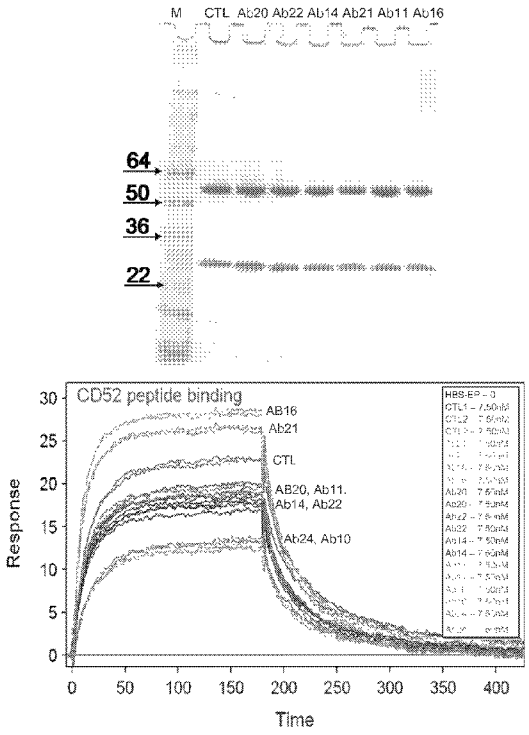
(81) Designated States *(unless otherwise indicated, for every kind of national protection available)*: AE, AG, AL, AM, AO, AT, AU, AZ, BA, BB, BG, BH, BN, BR, BW, BY, BZ, CA, CH, CL, CN, CO, CR, CU, CZ, DE, DK, DM, DO, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GT, HN, HR, HU, ID, IL, IN, IR, IS, JP, KE, KG, 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, PA, PE, PG, PH, PL, PT, QA, RO, RS, RU, RW, SA, SC, SD, SE, SG, SK, SL, SM, ST, SV, SY, TH, 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,

[Continued on next page]

(54) Title: ANTI-CD52 ANTIBODIES

FIG. 6



(57) Abstract: Anti-human CD52 antibodies and antigen-binding fragments thereof are provided. Also provided are isolated nucleic acids, recombinant vectors and host cells for making the antibodies and fragments. The antibodies and fragments can be used in therapeutic applications to treat, for example, autoimmune diseases, cancer, and graft rejection.

WO 2014/151644 A2

GM, KE, LR, LS, MW, MZ, NA, RW, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, RU, TJ, TM), European (AL, 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, RS, SE, SI, SK, SM, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, KM, ML, MR, NE, SN, TD, TG).

Published:

— *without international search report and to be republished upon receipt of that report (Rule 48.2(g))*

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