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

(19) World Intellectual Property Organization
International Bureau

(43) International Publication Date
27 November 2014 (27.11.2014)

WIPO | PCT

(10) International Publication Number
WO 2014/190356 A3

(51) International Patent Classification:
C07K 14/705 (2006.01) *A61K 39/00* (2006.01)
C07K 16/28 (2006.01)

(21) International Application Number:
PCT/US2014/039621

(22) International Filing Date:
27 May 2014 (27.05.2014)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
61/827,216 24 May 2013 (24.05.2013) US

(71) Applicants: **AMPLIMMUNE, INC.** [US/US]; 45 W. Watkins Mill Road, Gaithersburgh, Maryland 20878 (US). **THE JOHNS HOPKINS UNIVERSITY** [US/US]; 3400 N. Charles Street, Baltimore, Maryland 21218 (US).

(72) Inventors: **CHEN, Lieping**; 51 Canterbury Road, Hamden, Connecticut 06514 (US). **YAO, Sheng**; 11748 Bryce Overlook Court, Columbia, Maryland 21044 (US). **LIU, Linda**; 6512 Tipperary Court, Clarksville, Maryland 21029 (US). **LANGERMANN, Solomon**; 6606 Cross Country Blvd., Baltimore, Maryland 21215 (US).

(74) Agents: **PABST, Patrea L.** et al.; 1545 Peachtree Street, Suite 320, Atlanta, Georgia 30309 (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, 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).

Declarations under Rule 4.17:

— *of inventorship (Rule 4.17(iv))*

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:
23 April 2015

(54) Title: ANTI-B7-H5 ANTIBODIES AND THEIR USES

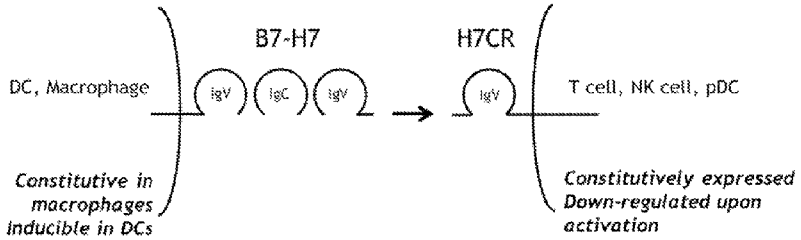


FIG. 1

(57) Abstract: The present invention relates to antibodies and their antigen-binding fragments and to other molecules that are capable of immunospecifically binding to the B7-H5 ligand of the B7-H5:CD28H pathway, and to the uses of such molecules in the treatment and diagnosis of autoimmune disease, transplant rejection and other inflammatory diseases.

WO 2014/190356 A3