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

(19) World Intellectual Property Organization
International Bureau

(43) International Publication Date
26 May 2011 (26.05.2011)

PCT

(10) International Publication Number
WO 2011/062560 A1

(51) International Patent Classification:
C07K 16/08 (2006.01) *G01N 33/53* (2006.01)
C07K 16/00 (2006.01) *A61K 39/395* (2006.01)
C12P 21/08 (2006.01) *C07K 16/30* (2006.01)
A61K 39/00 (2006.01) *C07K 7/06* (2006.01)
C07K 16/28 (2006.01) *C12P 21/00* (2006.01)

(21) International Application Number:
PCT/SG2010/000438

(22) International Filing Date:
18 November 2010 (18.11.2010)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
61/262,644 19 November 2009 (19.11.2009) US

(71) Applicants *(for all designated States except US)*: **NATIONAL UNIVERSITY OF SINGAPORE** [SG/SG]; 21 Lower Kent Ridge Road, Singapore 119077 (SG). **DSO NATIONAL LABORATORIES** [SG/SG]; 20 Science Park Drive, Singapore 118230 (SG).

(72) Inventors; and

(75) Inventors/Applicants *(for US only)*: **MACARY, Paul Anthony** [GB/SG]; c/o National University of Singapore, Yong Loo Lin School of Medicine, Department of Microbiology, 21 Lower Kent Ridge Road, Singapore 119077 (SG). **CHAN, Soh, Ha** [SG/SG]; c/o National University of Singapore, Yong Loo Lin School of Medicine, Department of Microbiology, 21 Lower Kent Ridge Road, Singapore 119077 (SG). **HANSON, Brendon, John** [SG/SG]; c/o DSO National Laboratories, 20 Science Park Drive, Singapore 118230 (SG).

(74) Agent: **AMICA LAW LLC**; 30 Raffles Place, #18/03-04 Chevron House, Singapore 048622 (SG).

(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, 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, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, 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, ML, MR, NE, SN, TD, TG).

Declarations under Rule 4.17:

— *of inventorship (Rule 4.17(iv))*

[Continued on next page]

(54) Title: METHOD FOR PRODUCING T CELL RECEPTOR-LIKE MONOCLONAL ANTIBODIES AND USES THEREOF

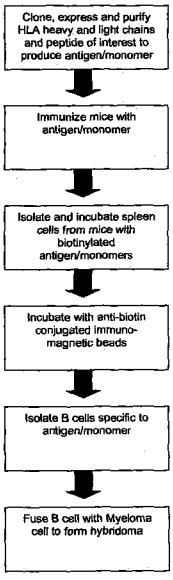


Figure 1

(57) Abstract: Methods are provided for producing T cell receptor (TCR) like antibodies that recognize peptides displayed in the context of HLA molecules. Antibodies produced by methods provided herein have the specificity of a TCR and can be used as therapeutic, diagnostic and research reagents. Also provided are TCR-like antibodies which recognize Epstein-Barr virus (EBV) peptides displayed in the context of HLA molecules and are useful for the detection and treatment of EBV and EBV-linked diseases.

WO 2011/062560 A1

Published:

— *with international search report (Art. 21(3))*

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