

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

(19) World Intellectual Property
Organization
International Bureau

(43) International Publication Date
03 October 2019 (03.10.2019)



(10) International Publication Number
WO 2019/190922 A1

(51) International Patent Classification:

A01K 67/027 (2006.01) C07K 14/74 (2006.01)
C07K 16/00 (2006.01)

(21) International Application Number:

PCT/US2019/023609

(22) International Filing Date:

22 March 2019 (22.03.2019)

(25) Filing Language:

English

(26) Publication Language:

English

(30) Priority Data:

62/647,720 24 March 2018 (24.03.2018) US
62/647,724 24 March 2018 (24.03.2018) US

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(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, DJ, DK, DM, DO, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GT, HN, HR, HU, ID, IL, IN, IR, IS, JO, JP, KE, KG, KH, KN, KP, KR, KW, KZ, LA, LC, LK, LR, LS, 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,

(54) Title: GENETICALLY MODIFIED NON-HUMAN ANIMALS FOR GENERATING THERAPEUTIC ANTIBODIES AGAINST PEPTIDE-MHC COMPLEXES, METHODS OF MAKING AND USES THEREOF

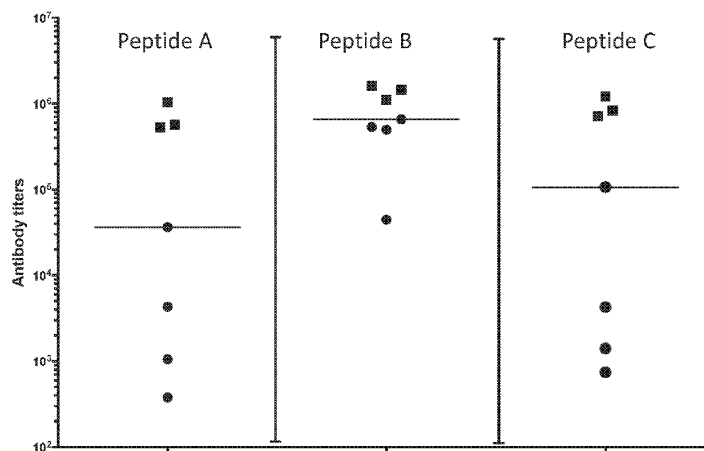


FIG. 3

(57) Abstract: A non-human animal is genetically modified with sequence encoding a human or humanized MHC molecule or associated molecule, e.g., $\beta 2$ microglobulin, and expression of the sequence by the non-human animal induces tolerance to the corresponding human HLA from which the human or human MHC molecule is derived. The tolerance exhibited by these non-human animals allows these animals to generate specific antibody responses to the corresponding human HLA when such HLA is presenting a peptide that is antigenic to the non-human animal. Such an antibody response, which specifically targets a pMHC complex of interest without binding to the MHC molecule may be useful in immunotherapeutic modalities that target a component of the immunological synapse which provides the specificity of that interaction.

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GM, KE, LR, LS, MW, MZ, NA, RW, SD, SL, ST, 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:

- *as to applicant's entitlement to apply for and be granted a patent (Rule 4.17(ii))*
- *as to the applicant's entitlement to claim the priority of the earlier application (Rule 4.17(iii))*

Published:

- *with international search report (Art. 21(3))*
- *with sequence listing part of description (Rule 5.2(a))*