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

(19) World Intellectual Property Organization
International Bureau

(43) International Publication Date
17 December 2009 (17.12.2009)

PCT

(10) International Publication Number
WO 2009/150835 A1

(51) International Patent Classification:
C07K 4/12 (2006.01) *C07K 14/74* (2006.01)
A61K 39/00 (2006.01) *C12N 5/06* (2006.01)
A61P 35/00 (2006.01) *C12N 15/09* (2006.01)
C07K 7/06 (2006.01)

(21) International Application Number:
PCT/JP2009/002613

(22) International Filing Date:
10 June 2009 (10.06.2009)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
61/060,538 11 June 2008 (11.06.2008) 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, 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, 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).

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))*

WO 2009/150835 A1

(54) Title: IQGAP3 EPITOPE PEPTIDES AND VACCINES CONTAINING THE SAME

(57) Abstract: Peptide vaccines against cancer are described herein. In particular, the present invention describes epitope peptides derived from IQGAP3 that elicit CTLs. The present invention also provides established CTLs that specifically recognize HLA-A24 or HLA-A02 positive target cells pulsed with the peptides. Antigen-presenting cells and exosomes that present any of the peptides, as well as methods for inducing antigen-presenting cells are also provided. The present invention further provides pharmaceutical agents containing the IQGAP3 polypeptides or polynucleotides encoding thereof, as well as exosomes and antigen-presenting cells as active ingredients. Furthermore, the present invention provides methods for treating and/or prophylaxis of (i.e., preventing) cancers (tumors), and/or prevention of postoperative recurrence thereof, as well as methods for inducing CTLs, methods for inducing anti-tumor immunity, using the IQGAP3 polypeptides, polynucleotides encoding the polypeptides, exosomes or antigen-presenting cells presenting the polypeptides, or the pharmaceutical agents of the present invention. The cancers to be targeted include, but are not limited to, renal, esophageal, gastric, lung, breast, bladder and pancreatic cancer.