

(19) World Intellectual Property Organization
International Bureau



(43) International Publication Date
15 November 2007 (15.11.2007)

PCT

(10) International Publication Number
WO 2007/129984 A1

(51) International Patent Classification:

C12N 15/866 (2006.01) A61K 39/00 (2006.01)

(21) International Application Number:

PCT/SG2006/000117

(22) International Filing Date: 5 May 2006 (05.05.2006)

(25) Filing Language: English

(26) Publication Language: English

(71) Applicant (for all designated States except US):
TEMASEK LIFE SCIENCES LABORATORY LIMITED [SG/SG]; 1 Research Link, National University of Singapore, Singapore 117604 (SG).

(72) Inventors; and

(75) Inventors/Applicants (for US only): **KWANG, Jimmy** [SG/SG]; 3 West Coast Walk, #13-02 West Peak, Singapore 127140 (SG). **LU, Li Qun** [CN/SG]; 16-11, Tower A, Heritage View, Dover Rise, Singapore 138769 (SG).

(74) Agent: **ELLA CHEONG SPRUSON & FERGUSON (SINGAPORE) PTE LTD**; P. O. Box 1531, Robinson Road Post Office, Singapore 903031 (SG).

(81) Designated States (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM,

AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, LY, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.

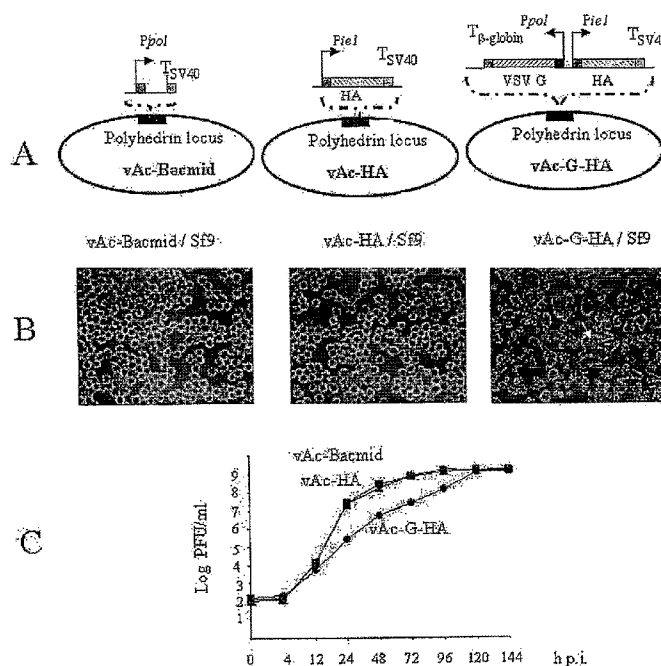
(84) Designated States (unless otherwise indicated, for every kind of regional protection available): ARIPO (BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

Published:

- with international search report
- with sequence listing part of description published separately in electronic form and available upon request from the International Bureau

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

(54) Title: BIOMOLECULE SURFACE DISPLAY AND USES THEREOF



(57) Abstract: A vaccine for the treatment or prevention of a disease in a subject, wherein said disease is associated with an avian influenza virus, and wherein said vaccine comprises an expression vector comprising a nucleic acid encoding a hemagglutinin peptide, such that in use said hemagglutinin peptide is expressed by said expression vector in said subject.

WO 2007/129984 A1