



(51) International Patent Classification:

C12N 15/113 (2010.01) C12N 15/67 (2006.01)
C12N 15/00 (2006.01) C12N 15/85 (2006.01)
C12N 15/21 (2006.01) C07K 14/56 (2006.01)

(21) International Application Number:

PCT/CA2012/000254

(22) International Filing Date:

20 March 2012 (20.03.2012)

(25) Filing Language:

English

(26) Publication Language:

English

(30) Priority Data:

61/474,879 13 April 2011 (13.04.2011) US

(71) Applicant (for all designated States except US): **NATIONAL RESEARCH COUNCIL OF CANADA**
[CA/CA]; 1200 Montreal Road, Ottawa, Ontario K1A 0R6 (CA).

(72) Inventor; and

(75) Inventor/Applicant (for US only): **DUROCHER, Yves**
[CA/CA]; 5335 Place d'Argenteuil, Montreal, Quebec H4J 1M1 (CA).

(74) Agents: **KOENIG, Hans** et al.; IP Portfolio Management,
National Research Council of Canada, 1200 Montreal
Road, Bldg. M55 Room 29, Ottawa, Ontario K1A 0R6 (CA).

(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, QA, RO, RS, RU, RW, 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,

[Continued on next page]

(54) Title: EXPRESSION SYSTEM WITH SAR ELEMENT FROM IFN α 2

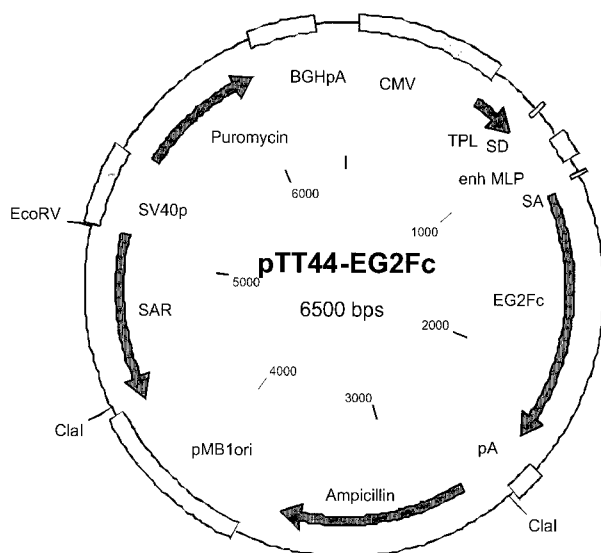


Fig. 5A

(57) Abstract: A short human genomic nucleotide sequence from the SAR3 region of the human interferon α 2 gene permits enhances expression stability in the absence of drug selection and permits generation of stable clones or stable pools of cells for producing recombinant proteins. Although stable clones may be generated, the ability to generate stable pools reduces the burden of generating stable clones.



GM, KE, LR, LS, MW, MZ, NA, RW, 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:

- *as to applicant's entitlement to apply for and be granted a patent (Rule 4.17(ii))*
- *of inventorship (Rule 4.17(iv))*

Published:

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