162162

2004072773

8 Dec 04

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

(19) World Intellectual Property Organization
International Bureau

(43) International Publication Date
24 December 2003 (24.12.2003)

PCT

(10) International Publication Number
WO 2003/106684 A3

(51) International Patent Classification[7]: C12N 15/67, 15/09, 15/11, 15/79, 15/90, 5/10

(21) International Application Number: PCT/NL2003/000432

(22) International Filing Date: 13 June 2003 (13.06.2003)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
02077350.3 14 June 2002 (14.06.2002) EP

(71) Applicant *(for all designated States except US)*: **CHROMAGENICS B.V.** [NL/NL]; Plantage Muidergracht 12, NL-1018 TV Amsterdam (NL).

(72) Inventors; and

(75) Inventors/Applicants *(for US only)*: **OTTE, Arie, Pieter** [NL/NL]; Apkenstraat 37, NL-1447 PN Purmerend (NL). **KRUCKEBERG, Arthur, Leo** [NL/NL]; Oosterpark 50, NL-1092 AP Amsterdam (NL). **SEWALT, Richard, George, Antonius, Bernardus** [NL/NL]; Oude Looierstraat 100-3, NL-1016 VK Amsterdam (NL).

(74) Agent: **PRINS, A.W.**; Nieuwe Parklaan 97, NL-2587 BN Den Haag (NL).

(81) Designated States *(national)*: AE, AG, AL, AM, AT (utility model), AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ (utility model), CZ, DE (utility model), DE, DK (utility model), DK, DM, DZ, EC, EE (utility model), EE, ES, FI (utility model), FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK (utility model), SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.

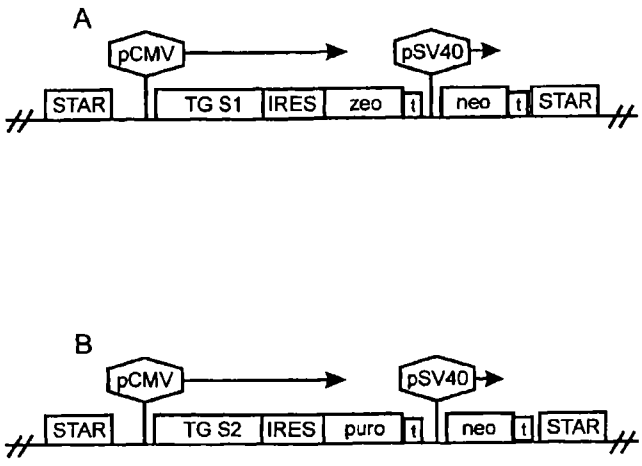
(84) Designated States *(regional)*: ARIPO patent (GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR), OAPI patent (BF, BJ,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

Published:
— *with international search report*

[Continued on next page]

(54) Title: A METHOD FOR SIMULTANEOUS PRODUCTION OF MULTIPLE PROTEINS; VECTORS AND CELLS FOR USE THEREIN

Schematic diagram of the invention



(57) Abstract: The present invention relates to a method for improving expression of two or more proteins in a (host) cell. The method is suited for production of for example recombinant antibodies that can be used in a pharmaceutical preparation or as a diagnostic tool. In one embodiment, the invention provides a method for obtaining a cell which expresses two or more proteins comprising providing said cell with two or more protein expression units encoding said two or more proteins, characterised in that at least two of said protein expression units comprise at least one STAR sequence wherin said STAR sequence protects said transgenes from the effect of gene silencing.

WO 2003/106684 A3

ACTION

(88) Date of publication of the international search report:
8 April 2004

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.