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INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(51) International Patent Classification 6 : C12N 15/62, 9/42, C07K 14/475, C12N 5/02 — A1

(11) International Publication Number: WO 97/26358

(43) International Publication Date: 24 July 1997 (24.07.97)

(21) International Application Number: PCT/CA97/00033

(22) International Filing Date: 16 January 1997 (16.01.97)

(30) Priority Data:
08/585,585 16 January 1996 (16.01.96) US

(60) Parent Application or Grant
(63) Related by Continuation
US 08/585,585 (CIP)
Filed on 16 January 1996 (16.01.96)

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(81) Designated States: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, HU, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, TJ, TM, TR, TT, UA, UG, US, UZ, VN, ARIPO patent (KE, LS, MW, SD, SZ, UG), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG).

Published
With international search report.
Before the expiration of the time limit for amending the claims and to be republished in the event of the receipt of amendments.

(54) Title: COMPOSITIONS AND METHODS FOR MODULATING CELL PROLIFERATION USING GROWTH FACTOR-POLYSACCHARIDE BINDING FUSION PROTEINS

(57) Abstract

Methods and compositions are provided for *in vitro* expansion of growth factor dependent cells. Expansion is effected through the use of growth factor conjugates that include a growth factor such as a steel factor and a polysaccharidase substrate binding region. The conjugates are immobilized by binding of the substrate binding region to a substrate of the polysaccharidase in a growth chamber for the cells.