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

(19) World Intellectual Property Organization
International Bureau

(43) International Publication Date
24 March 2005 (24.03.2005)

PCT

(10) International Publication Number
WO 2005/026388 A2

(51) International Patent Classification[7]: C12Q 1/68

(21) International Application Number:
PCT/EP2004/010311

(22) International Filing Date:
15 September 2004 (15.09.2004)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
60/502,653 15 September 2003 (15.09.2003) US

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(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, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, 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, IT, LU, 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:
— *without international search report and to be republished upon receipt of that report*

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.

WO 2005/026388 A2

(54) Title: THE USE OF EUKARYOTIC GENES AFFECTING CHROMATIN SEPARATION FOR DIAGNOSIS AND TREATMENT OF PROLIFERATIVE DISEASES

(57) Abstract: The present invention relates to the significant functional role of several C. elegans genes and of their corresponding gene products in chromatin separation during cell division that could be identified by means of RNA-mediated interference (RNAi) and to the identification and isolation of functional orthologs of said genes including all biologically functional derivatives thereof. The invention further relates to the use of said genes and gene products (including said orthologs) in the development or isolation of anti -proliferative agents, particularly their use in appropriate screening assays, and their use for diagnosis and treatment of proliferative and other diseases. In particular, the invention relates to the use of small interfering RNAs derived from said genes for the treatment of proliferative diseases.