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(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.