Title (en)

RETROVIRAL GENE TRANSFER VECTORS.

Title (de)

RETROVIRALE GENTRANSFERVEKTOREN.

Title (fr)

VECTEURS RETROVIRAUX DE TRANSFERT GENETIQUE.

Publication

EP 0192658 A4 19870713 (EN)

Application

EP 85903951 A 19850729

Priority

US 63542684 A 19840730

Abstract (en)

[origin: WO8600922A1] Recombinant DNA constructs include 5' and 3' retroviral LTR sequences, a genome packaging sequence, a promoter sequence and a eukaryotic cDNA sequence under the promotional control of the promoter sequence. By making the retroviral sequences of the construct deficient in coat protein-encoding sequences, the construct is by itself incapable of packaging its genome as a retrovirion. The promoter sequence may be a viral LTR sequence. Alternatively the promoter sequence may be a nonviral promoter linked to the cDNA sequence, promoting the cDNA irrespective of cellular mechanisms which affect viral sequence expression. The retroviral genomes corresponding to the constructs are rescued as complete packaged virions by helper virus vectors which encode the coat proteins that are needed to package the genomes corresponding to the constructs. Helper virus vectors that are deficient in packaging sequences do not package their own genomes, and cells incorporating such a deficient helper virus vector and also a construct shed only retrovirions that are infectious a single time. Helper viral vectors which produce amphotropic proteins package recombinant retrovirions that are infective of cells of a variety of species. Cells infected with recombinant retrovirions are transplantable into an animal to comprise a portion of the somatic cells of the animal and express recombinant gene product therein. Recombinant retrovirionsaccording to the invention, if inoculated into the peripheral fluid of a host animal, will infect and genetically alter the somatic cells of the animal.

IPC 1-7

C12N 1/00; C12N 7/00; C12N 7/04; C12N 15/00

IPC 8 full level

C07K 14/61 (2006.01); **C12N 15/867** (2006.01)

CPC (source: EP)

C07K 14/61 (2013.01); **C12N 15/86** (2013.01); C12N 2740/13043 (2013.01)

Citation (search report)

- [X] "EXPERIMENTAL MANIPULATION OF GENE EXPRESSION", edited by M. Inouye, 1983, chapter 8, pages 155-173, Academic Press, New York, US; R.C. MULLIGAN: "Construction of highly transmissible mammalian cloning vehicles derived from murine retroviruses"
- See references of WO 8600922A1

Designated contracting state (EPC)

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DOCDB simple family (publication)

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