

Title (en)

METHODS FOR OPTIMIZATION OF GENE THERAPY BY RECURSIVE SEQUENCE SHUFFLING AND SELECTION

Title (de)

VERFAHREN ZUR OPTIMIERUNG DER GENTHERAPIE DURCH WIDERHOLTES SEQUENZMISCHEN UND SELEKTION

Title (fr)

PROCEDES PERMETTANT L'OPTIMISATION D'UNE THERAPIE GENIQUE GRACE A UN REARRANGEMENT ET UNE SELECTION RECURSIFS DE SEQUENCES

Publication

EP 0964922 A1 19991222 (EN)

Application

EP 97943600 A 19970926

Priority

- US 3774296 P 19960927
- US 72266096 A 19960927
- US 9717300 W 19970926

Abstract (en)

[origin: WO9813487A1] The invention provides methods of evolving nucleic acids for use in gene therapy by recursive sequence recombination. Many of the methods evolve vectors, both viral and nonviral, to have improved properties. For example, vectors are evolved to have improved properties of viral titer, infectivity, expression of a gene within a vector, tissue specificity, viral genome capacity, episomal retention, lack of immunogenicity of the vectors or an expression product thereof, site-specific integration, increased stability, or capacity to confer cellular resistance to microorganism infection. The invention further provides a phagemidadenovirus capable of generating single stranded DNA greater than 10 kilobases comprising an adenovirus and a phage f1 replication origin.

IPC 1-7

C12N 15/10; **C12N 15/00**; **C12N 15/62**; **C12N 9/10**; **C12N 15/86**; **C12N 5/00**

IPC 8 full level

G01N 33/50 (2006.01); **A61K 38/45** (2006.01); **A61K 48/00** (2006.01); **C12N 7/00** (2006.01); **C12N 9/10** (2006.01); **C12N 15/09** (2006.01); **C12N 15/10** (2006.01); **G01N 33/15** (2006.01)

CPC (source: EP)

A61K 38/45 (2013.01); **A61K 48/00** (2013.01); **C12N 7/00** (2013.01); **C12N 9/1007** (2013.01); **C12N 15/1027** (2013.01); **C12N 15/1058** (2013.01); **C12N 2710/10043** (2013.01); **C12N 2795/14143** (2013.01)

Designated contracting state (EPC)

AT BE CH DE DK ES FI FR GB GR IE IT LI LU MC NL PT SE

DOCDB simple family (publication)

WO 9813487 A1 19980402; AU 4503797 A 19980417; CA 2266423 A1 19980402; EP 0964922 A1 19991222; EP 0964922 A4 20001025; JP 2001504325 A 20010403

DOCDB simple family (application)

US 9717300 W 19970926; AU 4503797 A 19970926; CA 2266423 A 19970926; EP 97943600 A 19970926; JP 51594198 A 19970926