

Title (en)

NOVEL LIPID COMPLEXES FOR TRANSFERRING AT LEAST A THERAPEUTICALLY ACTIVE SUBSTANCE, IN PARTICULAR A POLYNUCLEOTIDE INTO A TARGET CELL AND USE IN GENE THERAPY

Title (de)

KOMPLEXE LIPIDE ZUR ÜBERTRAGUNG VON WENIGSTENS EINER THERAPEUTISCH WIRKSAMEN VERBINDUNG, INSBESONDERES EIN POLYNUKLEOTID, IN EINER ZIELZELLE

Title (fr)

NOUVEAUX COMPLEXES LIPIDIQUES POUR LE TRANSFERT D'AU MOINS UNE SUBSTANCE THERAPEUTIQUEMENT ACTIVE, NOTAMMENT UN POLYNUCLEOTIDE, DANS UNE CELLULE CIBLE ET UTILISATION EN THERAPIE GENIQUE

Publication

**EP 0956050 A1 19991117 (FR)**

Application

**EP 98930836 A 19980611**

Priority

- FR 9801220 W 19980611
- FR 9707290 A 19970612

Abstract (en)

[origin: WO9856423A1] The invention concerns a complex comprising at least a lipid and at least a therapeutically active substance useful for transferring said substance into a target cell, characterised in that said lipid is of formula (I): in which: n<sub>1</sub>, n<sub>2</sub>, identical or different are whole numbers between 0 and 1; R<sub>1</sub>, R<sub>2</sub>, identical or different are: a) selected among the group consisting of a hydrogen atom and alkyl radicals with 1 to 6 carbon atoms optionally substituted, independently of one another, by a hydroxyl radical; or b) in one particular case for which n<sub>1</sub> = n<sub>2</sub> = 1, R<sub>1</sub> and R<sub>2</sub> can form together a divalent alkylene chain of 2 to 3 carbon atoms (C<sub>2</sub>-C<sub>3</sub>); R<sub>3</sub>, R<sub>4</sub>, identical or different are alkyl radicals of 1 to 6 carbon atoms or can together form a divalent alkylene chain of 2 to 3 carbon atoms (C<sub>2</sub>-C<sub>3</sub>); m, p, identical or different are whole numbers between 1 and 10; R<sub>5</sub>, R<sub>6</sub>, identical or different are selected in the group consisting of radicals of formula: 1) R<sub>7</sub>C(=O)-X- in which: X = NH, O, S; R<sub>7</sub> is an alkyl or alkenyl radical of 6 to 23 carbon atoms (C<sub>6</sub>-C<sub>23</sub>), linear or branched; 2) R<sub>8</sub>R<sub>9</sub>NC(=O)- in which: R<sub>8</sub>, R<sub>9</sub>, identical or different are selected among the group consisting of the hydrogen atom or alkyl or alkenyl radicals of 6 to 23 carbon atoms, linear or branched, provided that R<sub>8</sub>, R<sub>9</sub>, cannot simultaneously correspond to the hydrogen atom; 3) and one of the radicals R<sub>5</sub>, R<sub>6</sub> can moreover correspond to the hydrogen atom. The invention also concerns the use of said complex in gene therapy.

IPC 1-7

**A61K 47/48; C07C 237/06; C07D 295/12; C07D 295/14**

IPC 8 full level

**C07D 295/14** (2006.01); **A61K 47/48** (2006.01); **A61K 48/00** (2006.01); **C07C 237/06** (2006.01); **C07D 295/13** (2006.01); **C07D 295/15** (2006.01)

CPC (source: EP US)

**A61K 47/54** (2017.07 - EP US); **A61K 47/543** (2017.07 - EP US); **A61K 47/545** (2017.07 - EP US); **C07C 237/06** (2013.01 - EP US); **C07D 295/13** (2013.01 - EP US); **C07D 295/15** (2013.01 - EP US)

Citation (search report)

See references of WO 9856423A1

Designated contracting state (EPC)

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

DOCDB simple family (publication)

**WO 9856423 A1 19981217**; AU 739998 B2 20011025; AU 8113398 A 19981230; CA 2263367 A1 19981217; EP 0956050 A1 19991117; JP 2001500162 A 20010109; US 2002025920 A1 20020228; US 6291423 B1 20010918

DOCDB simple family (application)

**FR 9801220 W 19980611**; AU 8113398 A 19980611; CA 2263367 A 19980611; EP 98930836 A 19980611; JP 50179299 A 19980611; US 24225899 A 19990212; US 94735201 A 20010907