

Title (en)

COPOLYMERS FOR THE TRANSFER OF NUCLEIC ACIDS TO THE CELL

Title (de)

COPOLYMERÉ FÜR DEN TRANSPORT VON NUKLEINSÄUREN IN DIE ZELLE

Title (fr)

COPOLYMERES POUR LE TRANSPORT D'ACIDE NUCLEIQUE DANS LES CELLULES

Publication

EP 1208133 A1 20020529 (DE)

Application

EP 00947874 A 20000623

Priority

- EP 00947874 A 20000623
- EP 0005869 W 20000623
- EP 99112260 A 19990625

Abstract (en)

[origin: EP1063254A1] Charged polymer derivatives (I) comprising a cationic or anionic peptide or peptide derivative, a spermine or spermidine derivative, a glycosaminoglycan or a non-peptide oligo- or poly-cation or -anion linked to an amphiphilic polymer are new. Charged polymer derivatives (I) comprising a cationic or anionic peptide or peptide derivative, a spermine or spermidine derivative, a glycosaminoglycan or a non-peptide oligo- or poly-cation or -anion linked to an amphiphilic polymer are new. R = an amphiphilic polymer or a homo- or heterobifunctional derivative of an amphiphilic polymer; X = an amino acid, an amino acid derivative, a peptide, a peptide derivative a spermine or spermidine derivative, d-C(a)(c)b or N(a)(b)c, substituted aromatic ring with three functional groups W1Y1Z1 (W1, Y1 and Z1 are not defined); a = H or optionally halo- or dialkylamino-substituted 1-6C alkyl; b, c, d = H or optionally halo- or dialkylamino-substituted 1-6C alkylene; W, Y, Z = CO, NH, O, S or linked groups reactive with SH, OH, NH or NH2; E = a cationic or anionic peptide or peptide derivative, a spermine or spermidine derivative, a glycosaminoglycan or a non-peptide oligo- or poly-cation or -anion; m, n = 0-2; p = 3-20 and l = 1-5. Independent claims are also included for the following: (1) a compound (I) coupled to a ligand for a higher eukaryotic cell; (2) a complex comprising one or more nucleic acid molecules and one or more compounds (I); (3) a complex comprising one or more nucleic acid molecules condensed with organic polycation or cationic lipid molecules, with a compound (I) bound to its surface through ionic interaction.

IPC 1-7

C08G 65/329; C08G 65/333; A61K 48/00; C12N 15/87; A61K 47/48

IPC 8 full level

C12N 15/09 (2006.01); **A61K 31/7088** (2006.01); **A61K 38/00** (2006.01); **A61K 47/42** (2006.01); **A61K 47/48** (2006.01); **A61K 48/00** (2006.01);
C08G 65/329 (2006.01); **C08G 65/333** (2006.01); **C08G 81/00** (2006.01); **C12N 15/87** (2006.01)

CPC (source: EP)

A61K 47/6935 (2017.07); **A61K 48/00** (2013.01); **C08G 65/329** (2013.01); **C08G 65/333** (2013.01); **C08G 65/33396** (2013.01);
C12N 15/87 (2013.01)

Citation (search report)

See references of WO 0100709A1

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)

EP 1063254 A1 20001227; AU 6152000 A 20010131; CA 2377211 A1 20010104; EP 1208133 A1 20020529; JP 2003503569 A 20030128;
MX PA01012802 A 20030624; WO 0100709 A1 20010104

DOCDB simple family (application)

EP 99112260 A 19990625; AU 6152000 A 20000623; CA 2377211 A 20000623; EP 0005869 W 20000623; EP 00947874 A 20000623;
JP 2001506716 A 20000623; MX PA01012802 A 20000623