

Title (en)
VACCINES COMPRISING SYNTHETIC GENES

Title (de)
SYNTHETISCHE GENE ANTHALTETND VAKZINE

Title (fr)
VACCINS COMPRENANT DES GENES DE SYNTHESE

Publication
EP 0912607 A2 19990506 (EN)

Application
EP 97931230 A 19970617

Priority

- GB 9614943 A 19960716
- GB 9614942 A 19960716
- US 9710517 W 19970617
- US 2016696 P 19960621
- US 2016596 P 19960621

Abstract (en)
[origin: WO9748370A2] Synthetic polynucleotides comprising a DNA sequence encoding a peptide or protein are provided. The DNA sequence of the synthetic polynucleotides comprise codons optimized for expression in a nonhomologous host. The invention is exemplified by synthetic DNA molecules encoding HIV env as well as modifications of HIV env. The codons of the synthetic molecules include the projected host cell's preferred codons. The synthetic molecules provide preferred forms of foreign genetic material. The synthetic molecules may be used as a polynucleotide vaccine which provides immunoprophylaxis against HIV infection through neutralizing antibody and cell-mediated immunity. This invention provides polynucleotides which, when directly introduced into a vertebrate in vivo, including mammals such as primates and humans, induces the expression of encoded proteins within the animal.

IPC 1-7
C07K 14/16; C12N 15/67

IPC 8 full level
C12N 15/09 (2006.01); **A61K 38/00** (2006.01); **A61K 39/21** (2006.01); **A61P 37/04** (2006.01); **C07K 14/155** (2006.01); **C07K 14/16** (2006.01); **C12N 5/07** (2010.01); **C12N 5/078** (2010.01); **C12N 5/10** (2006.01); **C12N 15/67** (2006.01); **C12P 21/02** (2006.01)

CPC (source: EP)
A61P 37/04 (2017.12); **C07K 14/005** (2013.01); **C12N 15/67** (2013.01); **A61K 2039/51** (2013.01); **C07K 2319/00** (2013.01); **C12N 2740/16122** (2013.01)

Citation (search report)
See references of WO 9748370A2

Designated contracting state (EPC)
AT BE CH DE DK ES FI FR GB GR IE IT LI LU NL PT SE

DOCDB simple family (publication)
WO 9748370 A2 19971224; WO 9748370 A3 19980326; AU 3491897 A 19980107; AU 728422 B2 20010111; CA 2258568 A1 19971224; EP 0912607 A2 19990506; JP 2000516445 A 20001212

DOCDB simple family (application)
US 9710517 W 19970617; AU 3491897 A 19970617; CA 2258568 A 19970617; EP 97931230 A 19970617; JP 50326798 A 19970617