

Title (en)  
INTERFERON ALPHA PLASMIDS AND DELIVERY SYSTEMS, AND METHODS OF MAKING AND USING THE SAME

Title (de)  
INTERFERON-ALPHA PLASMIDE UND APPLICATIONSSYSTEME, UND METHODE FÜR IHRE HERSTELLUNG UND IHRE VERWENDUNGEN

Title (fr)  
PLASMIDES D'INTERFERON ALPHA, SYSTEMES D'ADMINISTRATION ET PROCEDES DE FABRICATION DESDITS PLASMIDES

Publication  
**EP 1064383 A2 20010103 (EN)**

Application  
**EP 99911340 A 19990312**

Priority

- US 9905394 W 19990312
- US 7865498 P 19980319

Abstract (en)  
[origin: WO9947678A2] The present invention relates to gene delivery and gene therapy, and provides novel nucleic acid constructs for expression of interferon alpha in a mammal, formulations for delivery that incorporate a nucleic acid construct for expression, and methods for preparing and using such constructs and formulations. In particular, this invention relates to plasmid constructs for delivery of therapeutic interferon alpha encoding nucleic acids to cells in order to modulate tumor activity, methods of using those constructs (including combination therapy with other agents, such as cytokines, preferably IL-12), as well as methods for preparing such constructs.

IPC 1-7  
**C12N 15/21**; **C07K 14/56**; **C12N 15/88**; **C12N 15/24**; **C07K 14/54**; **C12N 15/85**; **A61K 48/00**; **C12N 5/10**

IPC 8 full level  
**C12N 15/09** (2006.01); **A61K 9/127** (2006.01); **A61K 38/21** (2006.01); **A61K 48/00** (2006.01); **A61P 35/00** (2006.01); **C07K 14/54** (2006.01); **C07K 14/56** (2006.01); **C12N 1/15** (2006.01); **C12N 1/19** (2006.01); **C12N 1/21** (2006.01); **C12N 5/10** (2006.01); **C12N 15/21** (2006.01); **C12N 15/85** (2006.01); **A61K 38/00** (2006.01)

CPC (source: EP)  
**A61P 35/00** (2017.12); **C07K 14/5434** (2013.01); **C07K 14/56** (2013.01); **C12N 15/85** (2013.01); **A61K 38/00** (2013.01); **A61K 48/00** (2013.01); **C12N 2830/42** (2013.01); **C12N 2840/20** (2013.01)

Citation (search report)  
See references of WO 9947678A2

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 9947678 A2 19990923**; **WO 9947678 A3 19991209**; **WO 9947678 A9 20001109**; AU 3000399 A 19991011; CA 2323604 A1 19990923; EP 1064383 A2 20010103; JP 2002506647 A 20020305

DOCDB simple family (application)  
**US 9905394 W 19990312**; AU 3000399 A 19990312; CA 2323604 A 19990312; EP 99911340 A 19990312; JP 2000536861 A 19990312