

Title (en)  
STIMULATION OF CELL-MEDIATED IMMUNE RESPONSES BY TARGETED PARTICULATE GENETIC IMMUNIZATION

Title (de)  
STIMULIERUNG VON DURCH ZELLEN VERMITTELTEN IMMUNANTWORTEN DURCH GEZIELTE SPEZIELLE GENETISCHE IMMUNISIERUNG

Title (fr)  
STIMULATION DE REPONSES IMMUNES CELLULAIRES PAR UNE IMUNISATION GENIQUE CIBLEE UTILISANT UN AGENT PARTICULAIRE

Publication  
**EP 0863704 A4 20030910 (EN)**

Application  
**EP 96933987 A 19960927**

Priority  

- US 9615728 W 19960927
- US 53555695 A 19950928

Abstract (en)  
[origin: WO9711605A1] The present invention relates to various methods of genetic immunization for the purpose of providing antigen-specific immunity in a mammalian host, including a human host. The invention is based on the ability to direct particulate polynucleotides which express an antigenic protein or protein fragment to the cytoplasm of host target cells, such as antigen presenting cells. A directed delivery of such particulate polynucleotides to the cytoplasm of antigen presenting cells will stimulate antigen-specific CTL production, thus promoting destruction of affected cells such as neoplastic cells and virally infected cells.

IPC 1-7  
**A61K 39/00; A61K 48/00; A61K 47/02**

IPC 8 full level  
**A61K 47/48** (2006.01); **A61K 31/00** (2006.01); **A61K 39/00** (2006.01); **A61K 48/00** (2006.01); **A61P 31/00** (2006.01); **A61P 31/12** (2006.01); **A61P 31/14** (2006.01); **A61P 31/16** (2006.01); **A61P 31/18** (2006.01); **A61P 35/00** (2006.01); **A61P 37/00** (2006.01); **A61P 37/04** (2006.01)

CPC (source: EP KR US)  
**A61K 31/711** (2013.01 - EP KR); **A61K 39/0011** (2013.01 - EP KR US); **A61K 39/001102** (2018.08 - EP KR); **A61K 39/001106** (2018.08 - EP KR US); **A61K 39/001151** (2018.08 - EP KR US); **A61K 39/001182** (2018.08 - EP KR US); **A61K 39/001186** (2018.08 - EP KR US); **A61K 39/001191** (2018.08 - EP KR US); **A61K 39/001192** (2018.08 - EP KR US); **A61K 39/4615** (2023.05 - EP KR); **A61K 39/4622** (2023.05 - EP KR); **A61K 39/4644** (2023.05 - EP KR); **A61K 48/00** (2013.01 - EP KR); **A61P 31/00** (2018.01 - EP); **A61P 31/12** (2018.01 - EP); **A61P 31/14** (2018.01 - EP); **A61P 31/16** (2018.01 - EP); **A61P 31/18** (2018.01 - EP); **A61P 35/00** (2018.01 - EP); **A61P 37/00** (2018.01 - EP); **A61P 37/04** (2018.01 - EP); **A61K 2039/53** (2013.01 - EP KR); **A61K 2239/31** (2023.05 - EP KR); **A61K 2239/38** (2023.05 - EP KR)

Citation (search report)  

- [X] DATABASE MEDLINE [online] US NATIONAL LIBRARY OF MEDICINE (NLM), BETHESDA, MD, US; 4 September 1995 (1995-09-04), FOMSGAARD A: "[Genetic immunization--"the biological equivalent of cold fusion"?]", XP002238693, Database accession no. NLM7676526 & UGESKRIFT FOR LAEGER. DENMARK 4 SEP 1995, vol. 157, no. 36, 4 September 1995 (1995-09-04), pages 4932 - 4936, ISSN: 0041-5782
- [X] HEYDENBURG FULLER D ET AL: "A QUALITATIVE PROGRESSION IN HIV TYPE 1 GLYCOPROTEIN 120-SPECIFIC CYTOTOXIC CELLULAR AND HUMORAL IMMUNE RESPONSES IN MICE RECEIVING ADNA-BASED GLYCOPROTEIN 120 VACCINE", AIDS RESEARCH AND HUMAN RETROVIRUSES, NEW YORK, NY, US, vol. 10, no. 11, 1 November 1994 (1994-11-01), pages 1433 - 1441, XP000572444, ISSN: 0889-2229
- [X] LAI W C: "PROTECTION AGAINST MYCOPLASMA PULMONIS INFECTION BY GENETIC VACCINATION", DNA AND CELL BIOLOGY, NEW YORK, NY, US, vol. 14, no. 7, 1 July 1995 (1995-07-01), pages 643 - 651, XP000575588, ISSN: 1044-5498
- [X] DATABASE MEDLINE [online] US NATIONAL LIBRARY OF MEDICINE (NLM), BETHESDA, MD, US; 15 April 1995 (1995-04-15), ZAROZINSKI C C ET AL: "Protective CTL-dependent immunity and enhanced immunopathology in mice immunized by particle bombardment with DNA encoding an internal virion protein.", XP002238694, Database accession no. NLM7706740 & JOURNAL OF IMMUNOLOGY (BALTIMORE, MD.: 1950) UNITED STATES 15 APR 1995, vol. 154, no. 8, 15 April 1995 (1995-04-15), pages 4010 - 4017, ISSN: 0022-1767
- [DX] FYNAN E F ET AL: "DNA VACCINES: PROTECTIVE IMMUNIZATIONS BY PARENTERAL, MUCOSAL, AND GENE-GUN INOCULATIONS", PROCEEDINGS OF THE NATIONAL ACADEMY OF SCIENCES OF USA, NATIONAL ACADEMY OF SCIENCE. WASHINGTON, US, vol. 90, 1 December 1993 (1993-12-01), pages 11478 - 11482, XP000770731, ISSN: 0027-8424
- See also references of WO 9711605A1

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 9711605 A1 19970403**; AU 716497 B2 20000224; AU 7251596 A 19970417; BG 102355 A 19990430; CA 2233278 A1 19970403; CN 1201369 A 19981209; CZ 92998 A3 19980916; EP 0863704 A1 19980916; EP 0863704 A4 20030910; HU P9802651 A2 19990201; HU P9802651 A3 20010828; JP H11512724 A 19991102; KR 19990063672 A 19990726; NO 981386 D0 19980326; NO 981386 L 19980528; NZ 319891 A 19990128; PL 325953 A1 19980817; SK 40198 A3 19981104; TR 199800573 T2 19980721

DOCDB simple family (application)  
**US 9615728 W 19960927**; AU 7251596 A 19960927; BG 10235598 A 19980326; CA 2233278 A 19960927; CN 96198106 A 19960927; CZ 92998 A 19960927; EP 96933987 A 19960927; HU P9802651 A 19960927; JP 51376297 A 19960927; KR 19980702134 A 19980323; NO 981386 A 19980326; NZ 31989196 A 19960927; PL 32595396 A 19960927; SK 40198 A 19960927; TR 9800573 T 19960927