

Title (en)

INSERTIONAL MUTATIONS IN MYCOBACTERIA.

Title (de)

MUTATIONEN IN MYCOBAKTERIEN DURCH GENEINBAU.

Title (fr)

MUTATIONS PAR INSERTION DANS DES MYCOBACTERIES.

Publication

**EP 0590027 A4 19941019 (EN)**

Application

**EP 92913432 A 19920602**

Priority

- US 9204706 W 19920602
- US 71465691 A 19910613
- US 80670691 A 19911212

Abstract (en)

[origin: WO9222326A1] A mutated mycobacterium selected from the class consisting of mutated M.bovis-BCG, mutated M.tuberculosis, and mutated M.leprae. The mutation of M.bovis-BCG, M.tuberculosis, or M.leprae is preferably effected through an insertional mutation of a mycobacterial gene. The insertional mutagenesis may be effected, for example, through illegitimate recombination or by a mycobacterial transposon. Such mutated mycobacteria may then be transformed with an expression vector(s) containing a complement gene to the gene which is mutated, and preferably also including a heterologous gene.

IPC 1-7

**A61K 39/04; C12N 1/21**

IPC 8 full level

**A61K 39/04** (2006.01); **A61P 31/00** (2006.01); **A61P 31/04** (2006.01); **A61P 31/06** (2006.01); **C07K 14/35** (2006.01); **C12N 1/21** (2006.01); **C12N 15/09** (2006.01); **C12N 15/74** (2006.01); **A61K 39/00** (2006.01); **C12R 1/32** (2006.01)

CPC (source: EP)

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Citation (search report)

- [X] WO 9000594 A2 19900125 - WHITEHEAD BIOMEDICAL INST [US], et al
- [PX] WO 9201783 A1 19920206 - EINSTEIN COLL MED [US], et al
- [X] CARLOS MARTIN ET AL.: "Transposition of an antibiotic resistance element in mycobacteria", NATURE, vol. 345, no. 6277, 21 June 1990 (1990-06-21), LONDON GB, pages 739 - 743
- [A] W.R.JACOBS JR. ET AL.: "Development of BCG as a recombinant vaccine vehicle", CURRENT TOPICS IN MICROBIOLOGY AND IMMUNOLOGY, vol. 155, 1990, pages 153 - 160
- [PX] GANJAM V. KALPANA ET AL.: "Insertional mutagenesis and illegitimate recombination in mycobacteria", PROCEEDINGS OF THE NATIONAL ACADEMY OF SCIENCES OF USA., vol. 88, no. 12, 15 June 1991 (1991-06-15), WASHINGTON US, pages 5433 - 5437
- [PX] JEFFREY D. CIRILLO ET AL.: "A novel transposon Trap for mycobacteria: Isolation and characterization of IS1096", JOURNAL OF BACTERIOLOGY, vol. 173, no. 24, December 1991 (1991-12-01), pages 7772 - 7780
- [PX] P.M. ENGLAND ET AL.: "IS900-promoted stable integration of a foreign gene into mycobacteria", MOLECULAR MICROBIOLOGY, vol. 5, no. 8, August 1991 (1991-08-01), pages 2047 - 2052
- [PX] WILLIAM R. JACOBS, JR. ET AL.: "Genetic systems for mycobacteria", METHODS IN ENZYMOLOGY, vol. 204, 1991, pages 537 - 555
- See also references of WO 9222326A1

Designated contracting state (EPC)

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DOCDB simple family (application)

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