

Title (en)

GENE TRANSFER FOR DRUG RESISTANCE

Publication

EP 0386002 A4 19900926 (EN)

Application

EP 88906678 A 19880526

Priority

GB 8712528 A 19870528

Abstract (en)

[origin: EP0293193A2] A method for sensitizing mammalian tumor cells which comprises the step of inserting a drug sensitivity gene into the tumor cell. Also disclosed is the use of hypoxanthine phosphoribosyltransferase for the treatment of leukemia when the drug 6-thioguanine is used. The method employs a composition of matter which includes a 3 min long terminal repeat and a 5 min long terminal repeat, each repeat containing a restriction enzyme site; between the repeats is inserted a promoter and/or enhancer gene and the drug sensitivity gene. All of the elements of the DNA are linked and spatially positioned, such that, when the gene is inserted into a target cell the drug sensitivity gene is expressed.

IPC 1-7

C12P 21/00; C12P 19/34; C12N 7/00; C12N 15/00; A01N 63/02; A61K 37/48

IPC 8 full level

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A61K 48/00 (2006.01); **C12R 1/91** (2006.01); **C12R 1/92** (2006.01)

CPC (source: EP)

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Citation (search report)

- [X] WO 8600922 A1 19860213 - SALK INST FOR BIOLOGICAL STUDI [US]
- [X] THE JOURNAL OF BIOLOGICAL CHEMISTRY, vol. 259, no. 12, 25th June 1984, pages 7842-7849, the American Society of Biological Chemists, Inc., US; R.C. WILLIS et al.: "Partial phenotypic correction of human lesch-nyhan (hypoxanthine-guanine phosphoribosyltransferase-deficient) lymphoblasts with a transmissible retroviral vector"
- [X] BIOLOGICAL ABSTRACTS, vol. 83, 1987, abstract no. 85881, Biological Abstracts, Inc., Philadelphia, PA, US; S.M.W. CHANG et al.: "Construction of a defective retrovirus containing the human hypoxanthine phosphoribosyltransferase complementary DNA and its expression in cultured cells and mouse bone marrow", & MOL. CELL. BIOL. 7(2): 854-863, 1987
- [Y] MOLECULAR AND CELLULAR BIOLOGY, vol. 7, no. 5, May 1987, pages 1797-1806, American Society for microbiology; R.A. BOSSELMAN et al.: "Replication-defective chimeric helper proviruses and factors affecting generation of competent virus: Expression of moloney murine leukemia virus structural genes via the metallothionein promoter"
- [A] BIOTECHNOLOGY, vol. 3, no. 3, August 1985, pages 689-693, New York, US; D. McCORMICK: "Human gene therapy: The first round"
- [XP] MOL. BIOL. MED., vol. 4, 1987, pages 157-168, Academic Press, Inc., London, GB; S.B. HOWELL et al.: "Gene therapy for thioguanine-resistant human leukemia"
- See references of WO 8809383A1

Designated contracting state (EPC)

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IL 86532 A0 19881115; JP H02503512 A 19901025; NZ 224802 A 19910129; PT 87597 A 19880601; PT 87597 B 19920930;
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