

Title (en)  
METHOD FOR DETECTING AND KILLING EPITHELIAL CANCER CELLS

Title (de)  
VERFAHREN ZUR LOKALISIERUNG UND ZUM ABTÖTEN VON EPITHELIALEN KREBSZELLEN

Title (fr)  
PROCEDE POUR DETECTER ET TUER LES CELLULE DU CANCER EPITHELIAL

Publication  
**EP 1214101 A4 20050413 (EN)**

Application  
**EP 01916271 A 20010227**

Priority  
• US 0106318 W 20010227  
• US 0005387 W 20000228

Abstract (en)  
[origin: WO0164255A1] A diagnostic method for detecting cancerous epithelial cells by selectively marking the mitochondria of the cancer cells, by delivering to the epithelium a cationic supravital mitochondrial marking agent. Selective killing of cancerous epithelial cells in the presence of normal cells is effected by delivering a cationic supravital mitochondrial marking agent to epithelial cancer cells. The killing agent can also comprise the reaction product of the marking agent and a cancer chemotherapeutic drug or in admixture with drug.

IPC 1-7  
**A61K 49/00**; **A61K 31/54**; **A61B 10/00**; **A61P 35/00**

IPC 8 full level  
**C12Q 1/02** (2006.01); **A61K 45/00** (2006.01); **A61K 47/22** (2006.01); **A61K 47/48** (2006.01); **A61K 49/00** (2006.01); **A61P 35/00** (2006.01); **G01N 1/30** (2006.01)

CPC (source: EP KR)  
**A61K 49/00** (2013.01 - KR); **A61K 49/006** (2013.01 - EP); **A61P 35/00** (2017.12 - EP); **G01N 1/30** (2013.01 - EP)

Citation (search report)  
• [XY] US 5882627 A 19990316 - POMERANTZ EDWIN [US]  
• [PA] WO 0037107 A2 20000629 - SEARLE & CO [US], et al  
• [E] WO 0226266 A1 20020404 - ZILA INC [US], et al  
• [E] WO 0207693 A1 20020131 - ZILA INC [US], et al  
• [XY] CHEN L B ET AL: "STUDIES OF MITOCHONDRIA IN CARCINOMA CELLS WITH RHODAMINE 123", WEINSTEIN, I. B. AND H. J. VOGEL (ED.). P AND S BIOMEDICAL SCIENCES SYMPOSIA: GENES AND PROTEINS IN ONCOGENESIS; JUNE 4-6, 1982. XXI+403P. ACADEMIC PRESS, INC.: NEW YORK, N.Y., USA; LONDON, ENGLAND. ILLUS, 1983, pages P369 - 387, XP008043059, ISSN: 0-12-742420-2  
• See references of WO 0164255A1

Citation (examination)  
• US 4321251 A 19820323 - MASHBERG ARTHUR  
• WO 0164110 A1 20010907 - ZILA INC [US], et al  
• US 6086852 A 20000711 - BURKETT DOUGLAS D [US]  
• SUN X. ET AL: "Anticarcinoma Activity of a Novel Drug, 3-Ethyl-3'-methyl-thiatelluracarbocyanine Iodide (Te), a Tellurium-containing Cyanine Targeted at Mitochondria", CLINICAL CANCER RESEARCH, vol. 2, August 1996 (1996-08-01), United States, pages 1335 - 1340, ISSN: 1078-0432  
• LILEY D.T.J. ET AL: "Localization of Nonintercalative DNA Binding Antitumour Drug in Mitochondria: Relationship to Multidrug Resistance", EUROPEAN JOURNAL OF CLINICAL ONCOLOGY, vol. 25, no. 9, 1989, pages 1287 - 1293, ISSN: 0277-5379  
• GABRIELLI D. ET AL: "Binding, Aggregation and Photochemical Properties of Methylene Blue in Mitochondrial Suspensions", PHOTOCHEMISTRY AND PHOTOBIOLOGY, vol. 79, no. 3, 2004, pages 227 - 232

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

DOCDB simple family (publication)  
**WO 0164255 A1 20010907**; AU 3715400 A 20010912; AU 4331601 A 20010912; AU 785489 B2 20071115; BR 0104747 A 20020917; CA 2370741 A1 20010907; CN 100544770 C 20090930; CN 1365288 A 20020821; CZ 20013861 A3 20020814; EP 1214101 A1 20020619; EP 1214101 A4 20050413; IL 146141 A0 20020725; JP 2003525044 A 20030826; KR 100907122 B1 20090709; KR 20020000222 A 20020105; KR 20080080681 A 20080904; MX PA01010886 A 20020506; NO 20015242 D0 20011026; NO 20015242 L 20011129; NZ 515202 A 20030530; RU 2226404 C2 20040410; WO 0164110 A1 20010907

DOCDB simple family (application)  
**US 0106318 W 20010227**; AU 3715400 A 20000228; AU 4331601 A 20010227; BR 0104747 A 20010227; CA 2370741 A 20010227; CN 01800660 A 20010227; CZ 20013861 A 20010227; EP 01916271 A 20010227; IL 14614101 A 20010227; JP 2001563152 A 20010227; KR 20017013731 A 20010227; KR 20087020377 A 20080820; MX PA01010886 A 20010227; NO 20015242 A 20011026; NZ 51520201 A 20010227; RU 2001132076 A 20010227; US 0005387 W 20000228