

Title (en)
A NOVEL NITROREDUCTASE AND THERAPEUTIC USES THEREFOR

Title (de)
NEUARTIGE NITROREDUKTASE UND IHRE THERAPEUTISCHE VERWENDUNG

Title (fr)
NITROREDUCTASE NOUVELLE ET USAGES THERAPEUTIQUES ASSOCIES

Publication
EP 1069911 A1 20010124 (EN)

Application
EP 99917349 A 19990406

Priority

- US 9907546 W 19990406
- US 8091798 P 19980406
- US 8177898 P 19980414

Abstract (en)
[origin: WO9951270A1] In accordance with the present invention, the gene responsible for metronidazole sensitivity in H. pylori has been identified. Mutational inactivation of the gene, which encodes an oxygen-insensitive NADPH nitroreductase, referred to herein as rdxA (designated HP0954 in the entire genome sequence) (Tomb et al., 1997) is the cause of naturally acquired Mtz<R> in H. pylori. In accordance with one embodiment of the present invention, there is provided a method of employing RdxA and related compounds, optionally in conjunction with targeting compounds, to convert nitroaromatic compounds to cytotoxins for use in selectively killing or inhibiting the growth of target cell populations. In accordance with another aspect of the present invention, there is provided a method of employing RdxA and related compounds in order to convert nitroaromatic compounds to cytotoxins for use in selecting against cells expressing rdxA.

IPC 1-7
A61K 39/395; **A61K 31/04**; **A61K 31/05**; **A61K 31/06**; **C12N 1/21**; **C12N 9/06**; **C12N 11/02**; **C07H 21/04**

IPC 8 full level
A61K 45/06 (2006.01); **A61K 47/48** (2006.01); **A61P 35/00** (2006.01); **C07K 14/205** (2006.01); **C12N 1/21** (2006.01); **C12N 9/02** (2006.01)

CPC (source: EP)
A61K 45/06 (2013.01); **A61K 47/6815** (2017.07); **A61P 35/00** (2017.12); **C07K 14/205** (2013.01); **C12N 9/0036** (2013.01); **C07K 2319/00** (2013.01)

Citation (search report)
See references of WO 9951270A1

Designated contracting state (EPC)
AT BE CH DE DK ES FI FR GB IT LI SE

DOCDB simple family (publication)
WO 9951270 A1 19991014; CA 2325050 A1 19991014; EP 1069911 A1 20010124

DOCDB simple family (application)
US 9907546 W 19990406; CA 2325050 A 19990406; EP 99917349 A 19990406