

Title (en)
p53 PROTEINS WITH ALTERED TETRAMERIZATION DOMAINS

Title (de)
p53 PROTEINE MIT VERÄNDERTEN TETRAMERISIERUNGSDOMÄNEN

Title (fr)
PROTEINES p53 A DOMAINES DE TETRAMERISATION MODIFIES

Publication
EP 0799243 A4 19980819 (EN)

Application
EP 95941474 A 19951127

Priority

- US 9515353 W 19951127
- US 34779294 A 19941128
- US 43135795 A 19950428
- US 45662395 A 19950601

Abstract (en)
[origin: WO9616989A1] The present invention provides p53 proteins with altered tetramerization domains that retain wild-type p53 function, and the ability to form tetramers and have at least one of the following characteristics: (1) do not hetero-oligomerize with wild-type p53 or tumor-derived p53 mutants, and (2) restricted DNA binding specificity from an alteration in the way that the tetramerization domain orients the DNA binding domains of a p53 tetramer relative to one another. The invention also provides nucleic acids encoding the above proteins and methods of enhancing the cellular response to DNA damaging agents, treating diseases characterized by abnormal cell proliferation, and inducing immune tolerance to facilitate transplants and treatment of autoimmune disease, by administration of proteins of the invention or nucleic acid sequences encoding the proteins of the invention.

IPC 1-7
C07K 14/82; C07K 19/00; C07H 21/02; A61K 31/70; A61K 38/16

IPC 8 full level
C07K 14/47 (2006.01); **A61K 38/00** (2006.01); **A61K 48/00** (2006.01)

CPC (source: EP)
C07K 14/4746 (2013.01); **A61K 38/00** (2013.01); **A61K 48/00** (2013.01)

Citation (search report)

- [XY] PIETENPOL J. A. ET AL.: "SEQUENCE-SPECIFIC TRANSCRIPTIONAL ACTIVATION IS ESSENTIAL FOR GROWTH SUPPRESSION BY P53", PROCEEDINGS OF THE NATIONAL ACADEMY OF SCIENCES OF USA, vol. 91, March 1994 (1994-03-01), pages 1998 - 2002, XP002019922
- [XY] HALAZONETIS T. D. ET AL.: "CONFORMATIONAL SHIFTS PROPAGATE FROM THE OLIGOMERIZATION DOMAIN OF P53 TO ITS TETRAMERIC DNA BINDING DOMAIN AND RESTORE DNA BINDING TO SELECT P53 MUTANTS", EMBO JOURNAL, vol. 12, no. 13, 1 January 1993 (1993-01-01), pages 5057 - 5064, XP002003078
- [PX] WATERMAN J.L.F. ET AL.: "The dihedral symmetry of the p53 tetramerization domain mandates a conformational switch upon DNA binding.", EMBO JOURNAL, vol. 14, no. 3, 3 February 1995 (1995-02-03), pages 512 - 519, XP002067901
- See references of WO 9616989A1

Designated contracting state (EPC)
DE FR GB

DOCDB simple family (publication)
WO 9616989 A1 19960606; AU 4288496 A 19960619; EP 0799243 A1 19971008; EP 0799243 A4 19980819

DOCDB simple family (application)
US 9515353 W 19951127; AU 4288496 A 19951127; EP 95941474 A 19951127