

Title (en)

AMINO ACID TRANSPORT PROTEINS, AMINO ACID ANALOGUES, ASSAY APPARATUS, USES THEREOF FOR TREATMENT AND DIAGNOSIS OF CANCER

Publication

EP 0436612 A4 19920520 (EN)

Application

EP 89911006 A 19891002

Priority

- AU PJ069588 A 19880930
- AU PJ071388 A 19881003
- AU PJ325889 A 19890317
- AU PJ494889 A 19890628
- AU PJ536489 A 19890729
- AU PJ561189 A 19890804
- AU PJ564089 A 19890807
- AU PJ587289 A 19890821
- AU PJ631589 A 19890912

Abstract (en)

[origin: WO9003399A1] Compounds and methods for the treatment and diagnosis of cancer are provided. Also provided are methods for isolating human amino acid transporters or subunits thereof, and substantially purified transporters or subunits. In particular, there are disclosed glutamine transporters that are common to tumours, but which are generally not found, or are less active, or are present in lower quantities in most non-tumour cells. Diagnostic products and methods, and biological products relating to the amino acid transporters are disclosed. Therapeutic products including antiglutamine compounds, glutamine analogues, antibody compositions, pharmaceutical compositions and vaccines, and methods for treating animals including humans, are provided. Screening methods and apparatuses for screening compounds which inhibit glutamine uptake into tumour cells are also disclosed.

IPC 1-7

C07K 15/14; C07K 15/12; G01N 33/53; G01N 33/574; G01N 33/68; C12M 1/18; C12Q 1/02; C12N 15/00; A61K 49/00; A61K 37/02; A61K 39/395

IPC 8 full level

A61K 31/195 (2006.01); **A61K 31/198** (2006.01); **A61K 31/395** (2006.01); **A61K 31/396** (2006.01); **A61K 31/397** (2006.01); **A61K 31/40** (2006.01); **A61K 31/675** (2006.01); **A61K 38/00** (2006.01); **A61K 47/48** (2006.01); **A61K 51/00** (2006.01); **A61P 7/00** (2006.01); **A61P 35/00** (2006.01); **A61P 37/00** (2006.01); **C07C 229/22** (2006.01); **C07C 229/24** (2006.01); **C07C 229/26** (2006.01); **C07C 237/04** (2006.01); **C07C 237/06** (2006.01); **C07C 237/08** (2006.01); **C07C 237/22** (2006.01); **C07C 243/34** (2006.01); **C07C 259/06** (2006.01); **C07C 275/06** (2006.01); **C07C 275/46** (2006.01); **C07C 309/66** (2006.01); **C07C 323/25** (2006.01); **C07C 323/60** (2006.01); **C07D 203/18** (2006.01); **C07D 205/08** (2006.01); **C07D 207/06** (2006.01); **C07D 207/46** (2006.01); **C07D 207/48** (2006.01); **C07D 211/42** (2006.01); **C07D 213/40** (2006.01); **C07D 213/64** (2006.01); **C07D 263/10** (2006.01); **C07D 295/14** (2006.01); **C07D 295/185** (2006.01); **C07D 295/22** (2006.01); **C07D 295/32** (2006.01); **C07D 313/00** (2006.01); **C07F 9/53** (2006.01); **C07K 1/14** (2006.01); **C07K 14/00** (2006.01); **C07K 14/005** (2006.01); **C07K 14/195** (2006.01); **C07K 14/705** (2006.01); **C07K 16/00** (2006.01); **C07K 16/30** (2006.01); **C12P 21/08** (2006.01); **G01N 33/53** (2006.01); **G01N 33/566** (2006.01); **G01N 33/574** (2006.01); **G01N 33/68** (2006.01)

CPC (source: EP)

A61K 47/6851 (2017.07); **A61P 7/00** (2017.12); **A61P 35/00** (2017.12); **A61P 37/00** (2017.12); **C07C 229/24** (2013.01); **C07C 237/04** (2013.01); **C07C 237/06** (2013.01); **C07C 237/08** (2013.01); **C07C 243/34** (2013.01); **C07C 259/06** (2013.01); **C07C 309/66** (2013.01); **C07C 323/25** (2013.01); **C07D 211/42** (2013.01); **C07D 213/40** (2013.01); **C07D 213/64** (2013.01); **C07D 263/10** (2013.01); **C07D 295/185** (2013.01); **C07D 295/32** (2013.01); **C07D 313/00** (2013.01); **C07K 14/705** (2013.01); **C07K 16/30** (2013.01); **G01N 33/566** (2013.01); **G01N 33/57407** (2013.01); **G01N 33/57426** (2013.01); **G01N 33/57492** (2013.01); **G01N 33/68** (2013.01); **A61K 38/00** (2013.01)

Citation (search report)

- [X] WO 8707836 A2 19871230 - INST NAT SANTE RECH MED [FR]
- [A] GB 2160869 A 19860102 - ROTTA RESEARCH LAB
- BIOCHEMISTRY, vol. 22, no. 4, 1983, pages 844-850, Washington, US; A.G. HUNT et al.: "Properties and characterization of binding protein dependent active transport of glutamine in isolated membrane vesicles of Escherichia coli"
- THE JOURNAL OF BIOLOGICAL CHEMISTRY, vol. 255, no. 9, 10th May 1980, pages 4011-4019, Baltimore, US; M.S. KILBERG et al.: "Characteristics of an amino acid transport system in rat liver for glutamine, asparagine, histidine, and closely related analogs"
- BIOCHEMISTRY, vol. 18, no. 11, 1979, pages 2232-2238, American Chemical Society, Washington, US; S.-H. LEE et al.: "Isolation, purification, and reconstitution of a proline carrier protein from mycobacterium phlei"
- CHEMICAL ABSTRACTS, vol. 107, 1987, page 442, abstract no. 113450t, Columbus, Ohio, US; F. KALLINOWSKI et al.: "L-Glutamine: a major substrate for tumor cells in vivo?", & J. CANCER RES. CLIN. ONCOL. 1987, 113(3), 209-15
- JOURNAL OF MEDICINAL CHEMISTRY, vol. 22, no. 9, 1979, pages 1034-1037, American Chemical Society; A. ROSOWSKY et al.: "Structural analogues of L-glutamin acid gamma-(4-hydroxyanilide) and gamma-(3,4-dihydroxyanilide) as potential agents against melanoma"
- J. CHEM. SOC. PERKIN TRANS. I, 1984, pages 1989-2004, Letchworth, GB; D.J. ANTONJUK et al.: "Synthesis of monoamides of methotrexate from L-glutamin acid monoamide t-butyl esters"
- PATENT ABSTRACTS OF JAPAN, vol. 7, no. 122 (C-168)[1267], 26th May 1983; & JP-A-58 40 094 (WAKUNAGA YAKUHIIN K.K.) 08-03-1983
- See references of WO 9003399A1

Designated contracting state (EPC)

AT BE CH DE FR GB IT LI LU NL SE

DOCDB simple family (publication)

WO 9003399 A1 19900405; EP 0436612 A1 19910717; EP 0436612 A4 19920520; JP H06504031 A 19940512

DOCDB simple family (application)

AU 8900427 W 19891002; EP 89911006 A 19891002; JP 51027889 A 19891002