

Title (en)

IN VITRO ANTIBODY AFFINITY MATURATION USING ALANINE SCANNING MUTAGENESIS

Title (de)

IN VITRO REIFUNG VON ANTIKÖRPERN MITTELS ALANIN 'SCANNING' MUTAGENESE

Title (fr)

MATURATION D'ANTICORPS IN VITRO PAR AFFINITE UTILISANT LA MUTAGENESE PAR BALAYAGE A L'ALANINE

Publication

**EP 0748338 A4 20010328 (EN)**

Application

**EP 95911994 A 19950227**

Priority

- US 9502492 W 19950227
- US 20607994 A 19940304

Abstract (en)

[origin: WO9523813A1] A method of mutagenizing antibodies to produce modified antibodies, modified antibodies, DNA encoding the modified antibodies as well as diagnostic kits and pharmaceutical compositions comprising the antibodies or DNA are provided.

IPC 1-7

**C07K 16/00**; **C07K 16/46**; **A61K 39/00**; **C12N 15/12**; **C12N 15/13**

IPC 8 full level

**C07K 16/08** (2006.01); **C07K 16/10** (2006.01); **C12N 15/09** (2006.01); **C12P 21/08** (2006.01); **A61K 38/00** (2006.01)

CPC (source: EP)

**C07K 16/1063** (2013.01); **A61K 38/00** (2013.01)

Citation (search report)

- [XY] LISA K. DENZIN ET AL.: "Mutational analysis of active site contact residues in anti-fluorescein monoclonal antibody", MOLECULAR IMMUNOLOGY, vol. 30, no. 15, 1993, pages 1331 - 1345, XP000943436
- [XY] ROBERT F. KELLEY AND MARK P. O'CONNELL: "Thermodynamic analysis of an antibody functional epitope", BIOCHEMISTRY, vol. 32, 1993, pages 6828 - 6835, XP000943393
- [PY] MIROSLAW K. GORNY ET AL.: "Human anti-V2 monoclonal antibody that neutralizes primary but not laboratory isolates of human immunodeficiency virus type I", JOURNAL OF VIROLOGY, vol. 68, no. 12, 15 December 1994 (1994-12-15), pages 8312-8320, XP000943394
- [PX] CRAIG M. LEWIS ET AL: "Use of alanine scanning mutagenesis to improve the affinity of an anti-gp120 (HIV)antibody", JOURNAL OF CELLULAR BIOCHEMISTRY, SUPPLEMENT - KEYSTONE SYMPOSIUM ON ANTIBODY ENGINEERING, vol. 32, 7 March 1994 (1994-03-07) - 13 March 1994 (1994-03-13), XP000943396
- See references of WO 9523813A1

Designated contracting state (EPC)

AT BE CH DE DK ES FR GB GR IE IT LI LU NL PT SE

DOCDB simple family (publication)

**WO 9523813 A1 19950908**; CA 2183550 A1 19950908; EP 0748338 A1 19961218; EP 0748338 A4 20010328; JP H09509835 A 19971007

DOCDB simple family (application)

**US 9502492 W 19950227**; CA 2183550 A 19950227; EP 95911994 A 19950227; JP 52298095 A 19950227