

Title (en)

NOVEL ANTIGEN BINDING MOLECULES FOR THERAPEUTIC, DIAGNOSTIC, PROPHYLACTIC, ENZYMATIC, INDUSTRIAL, AND AGRICULTURAL APPLICATIONS, AND METHODS FOR GENERATING AND SCREENING THEREOF

Title (de)

NEUE ANTIGENBINDENDE MOLEKÜLE FÜR THERAPEUTISCHE, DIAGNOSTISCHE, PROPHYLAKTISCHE, ENZYMATISCHE, INDUSTRIELLE UND LANDWIRTSCHAFTLICHE ANWENDUNGEN UND VERFAHREN ZUR ERZEUGUNG UND ZUM SCREENING DAVON

Title (fr)

NOUVELLES MOLECULES DE LIAISON A UN ANTIGENE DESTINEES A DES APPLICATIONS THERAPEUTIQUES, DIAGNOSTIQUES, PROPHYLACTIQUES, ENZYMATIQUES, INDUSTRIELLES ET AGRICOLES ET PROCEDES DE GENERATION ET DE CRIBLAGE DE TELLES MOLECULES

Publication

EP 1421203 A4 20050601 (EN)

Application

EP 02747843 A 20020517

Priority

- US 0215767 W 20020517
- US 30038101 P 20010517
- US 30090701 P 20010625

Abstract (en)

[origin: WO02092780A2] The invention is directed to methods for generating sets, or libraries, of nucleic acids encoding antigen-binding sites, such as antibodies, antibody domains or other fragments, including single and double stranded antibodies, major histocompatibility complex (MHC) molecules, T cell receptors (TCRs), and the like. This invention provides methods for generating variant antigen binding sites, e.g., antibodies and specific domains or fragments of antibodies (e.g., Fab or Fc domains), by altering template nucleic acids including by saturation mutagenesis, synthetic ligation reassembly, or a combination thereof. In one aspect, the invention provides methods for generating all human or humanized antibodies and evolving them to achieve optimized properties related to stability, duration, expression, production, enzymatic activity, affinity, avidity, localization, and other immunological properties. Polypeptides generated by these methods can be analyzed using a novel capillary array platform, which provides unprecedented ultra-high throughput screening.

IPC 1-7

C12N 15/10; C12N 15/66; C12Q 1/68

IPC 8 full level

C12N 15/09 (2006.01); **C12N 15/10** (2006.01); **C12N 15/66** (2006.01); **C12Q 1/68** (2006.01)

CPC (source: EP)

C12N 15/102 (2013.01); **C12N 15/1027** (2013.01); **C12N 15/1093** (2013.01); **C12N 15/66** (2013.01)

Citation (search report)

- [X] WO 0053744 A2 20000914 - DIVERSA CORP [US]
- [X] WO 9115581 A1 19911017 - CREA ROBERTO [US]
- [X] WO 0018906 A2 20000406 - MAXYGEN INC [US], et al
- [A] WO 9827230 A1 19980625 - MAXYGEN INC [US], et al
- [Y] SCHULTZ S ET AL: "Site-saturation studies of beta-lactamase: production and characterization of mutant beta-lactamases with all possible amino acid substitutions at residue 71", PROCEEDINGS OF THE NATIONAL ACADEMY OF SCIENCES OF USA, NATIONAL ACADEMY OF SCIENCE. WASHINGTON, US, vol. 83, no. 6, March 1986 (1986-03-01), pages 1588 - 1592, XP002147196, ISSN: 0027-8424
- [Y] HORWITZ B H ET AL: "SATURATION MUTAGENESIS USING MIXED OLIGONUCLEOTIDES AND M13 TEMPLATES CONTAINING URACIL", METHODS IN ENZYMOLOGY, ACADEMIC PRESS INC, SAN DIEGO, CA, US, vol. 185, 1990, pages 599 - 611, XP000993477, ISSN: 0076-6879
- See references of WO 02092780A2

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 02092780 A2 20021121; WO 02092780 A3 20040325; EP 1421203 A2 20040526; EP 1421203 A4 20050601; JP 2004532038 A 20041021

DOCDB simple family (application)

US 0215767 W 20020517; EP 02747843 A 20020517; JP 2002589648 A 20020517