

Title (en)

KINASE ACTIVITY MEASUREMENT USING FLUORESCENCE POLARIZATION

Title (de)

MESSUNG DER KINASEAKTIVITÄT MITTELS FLUORESZENTPOLARISATION

Title (fr)

MESURE DE L'ACTIVITE DE LA KINASE PAR POLARISATION DE FLUORESCENCE

Publication

EP 0938586 A4 20020130 (EN)

Application

EP 97952171 A 19971028

Priority

- US 9719570 W 19971028
- US 2983196 P 19961028

Abstract (en)

[origin: WO9818956A1] A method for quantitating enzyme activity of phosphorylation and dephosphorylation of a peptide or protein substrate, comprising measuring the fluorescence polarization of a fluorescence-emitting reporter molecule in solution with the phosphate. Then, adding an enzyme, either a kinase or a phosphatase, and incubating the solution. Finally, measuring the fluorescence polarization of the solution after the enzyme has had an opportunity to react with the peptide or protein substrate.

IPC 1-7

C12Q 1/42; C12Q 1/48; G01N 33/542

IPC 8 full level

G01N 33/542 (2006.01); **G01N 33/573** (2006.01); **G01N 33/68** (2006.01)

CPC (source: EP)

G01N 33/542 (2013.01); **G01N 33/573** (2013.01); **G01N 33/68** (2013.01); **G01N 33/6842** (2013.01)

Citation (search report)

- [PX] WO 9739326 A2 19971023 - ARIAD PHARMA INC [US], et al
- [OPX] SEETHALA R, MENZEL R, SQUIBB BRISTOL-MYERS: "A Fluorescence Polarization Tyrosine Kinase Assay for High Throughput Screening", ANNUAL CONFERENCE OF THE SOCIETY FOR BIOMOLECULAR SCREENING, XX, XX, no. 3, 22 September 1997 (1997-09-22) - 25 September 1997 (1997-09-25), XX, pages 6 - 59, XP002968015 & US 6203994 B1 20010320 - EPPS DENNIS E [US], et al
- [Y] DANDLIKER, WALTER B. ET AL: "Equilibrium and kinetic inhibition assays based upon fluorescence polarization", METHODS ENZYMOL. (1981), 74(IMMUNOCHEM. TECH., PT. C), 3-28, 1981, XP001029241
- [Y] CHECOVICH W J ET AL: "Fluorescence polarization - a new tool for cell and molecular biology", NATURE, MACMILLAN JOURNALS LTD. LONDON, GB, vol. 375, 18 May 1995 (1995-05-18), pages 254 - 256, XP002100426, ISSN: 0028-0836
- [Y] ZEMLAN F P ET AL: "MONOCLONAL ANTIBODY PHF-9 RECOGNIZES PHOSPHORYLATED SERINE 404 OF TAU PROTEIN AND LABELS PAIRED HELICAL FILAMENTS", JOURNAL OF NEUROSCIENCE RESEARCH, WILEY-LISS, US, vol. 46, no. 1, 1 October 1996 (1996-10-01), pages 90 - 97, XP000646724, ISSN: 0360-4012
- [Y] WRIGHT D E ET AL: "FLUOROMETRIC ASSAY FOR CYCLIC AMP DEPENDENT PROTEIN KINASE EC-2.7.1.37 AND PHOSPHO PROTEIN PHOSPHATASE EC-3.1.3.16 ACTIVITIES", PROCEEDINGS OF THE NATIONAL ACADEMY OF SCIENCES OF THE UNITED STATES, vol. 78, no. 10, 1981, 1981, pages 6048 - 6050, XP001029505, ISSN: 0027-8424
- [A] Z-Y ZHANG ET AL: "A Continuous Spectrophotometric and Fluorimetric Assay for Protein Tyrosine Phosphatase Using Phosphotyrosine-Containing Peptides", ANALYTICAL BIOCHEMISTRY, ACADEMIC PRESS, SAN DIEGO, CA, US, vol. 211, 1993, pages 7 - 15, XP002100427, ISSN: 0003-2697
- See references of WO 9818956A1

Designated contracting state (EPC)

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

DOCDB simple family (publication)

WO 9818956 A1 19980507; EP 0938586 A1 19990901; EP 0938586 A4 20020130

DOCDB simple family (application)

US 9719570 W 19971028; EP 97952171 A 19971028