

Title (en)

LABELLING REAGENTS, METHODS FOR THE SYNTHESIS OF SUCH REAGENTS AND METHODS FOR THE DETECTION OF BIOLOGICAL MOLECULES

Title (de)

MARKIERUNGSREAGENTIEN, VERFAHREN FÜR DIE SYNTHESE SOLCHER REAGENTIEN UND VERFAHREN ZUM NACHWEIS BIOLOGISCHER MOLEKÜLE

Title (fr)

REACTIFS DE MARQUAGE, PROCEDES DE SYNTHESE DE TELS REACTIFS ET PROCEDES DE DETECTION DE MOLECULES BIOLOGIQUES

Publication

EP 1727825 A1 20061206 (FR)

Application

EP 05739660 A 20050324

Priority

- FR 2005050192 W 20050324
- FR 0450600 A 20040326

Abstract (en)

[origin: WO2005092910A1] The invention relates to a temperature-stable labelling reagent having formula (0), wherein: R<1> represents H or an alkyl, aryl or substituted aryl group; R<2> represents a detectable label or at least two detectable labels which are inter-linked by at least one multimeric structure; L is a linker arm comprising a linear chain of at least two covalent bonds and n is an integer equal to 0 or 1; R<3> and R<4> represent, independently of each other, H, NO₂, Cl, Br, F, I, R<2> -(L)n-Y-X-, OR, SR, NR₂, R, NHCOR, CONHR, COOR, -CO-NH-(CH₂)₃-(O-CH₂-CH₂)₃-CH₂-NH-R<2>, -CO-NH-(CH₂)₃-(O-CH₂-CH₂)₄-CH₂-NH-R<2>, in which R = alkyl or aryl; A is a linker arm comprising at least one double covalent bond enabling the conjugation of the diazo function with the aromatic ring and u is an integer of between 0 and 2, preferably 0 or 1; -Y-X- represents -CONH-, -NHCO-, -CH₂O-, -CH₂S-; Z represents -NH-, -NHCO-, -CONH- or -O-; m is an integer of between 1 and 10, preferably between 1 and 3; and p is an integer of between 1 and 10, preferably between 1 and 3. The invention also relates to a method for the synthesis of said labels and to the use thereof for labelling biological molecules, particularly nucleic acids, with a labelling reagent bearing the diazomethyl function. The invention is particularly suitable for use in the field of diagnostics.

IPC 8 full level

C07H 19/20 (2006.01); **C07D 495/04** (2006.01); **C07H 21/00** (2006.01); **C12Q 1/68** (2006.01); **G01N 33/58** (2006.01); **G01N 33/68** (2006.01)

CPC (source: EP US)

C07D 495/04 (2013.01 - EP US); **Y10T 436/13** (2015.01 - EP US); **Y10T 436/143333** (2015.01 - EP US)

Citation (search report)

See references of WO 2005092910A1

Cited by

WO2012076794A1; WO2014019966A1

Designated contracting state (EPC)

AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IS IT LI LT LU MC NL PL PT RO SE SI SK TR

DOCDB simple family (publication)

FR 2868071 A1 20050930; FR 2868071 B1 20060609; AU 2005225589 A1 20051006; CA 2558357 A1 20051006; CN 1938329 A 20070328; EP 1727825 A1 20061206; JP 2007530024 A 20071101; JP 4745331 B2 20110810; US 2008032288 A1 20080207; US 7691635 B2 20100406; WO 2005092910 A1 20051006

DOCDB simple family (application)

FR 0450600 A 20040326; AU 2005225589 A 20050324; CA 2558357 A 20050324; CN 200580009785 A 20050324; EP 05739660 A 20050324; FR 2005050192 W 20050324; JP 2007504455 A 20050324; US 59097305 A 20050324