

Title (en)

CYANINE DERIVATIVES, FLUORESCENT CONJUGATES CONTAINING SAME AND USE THEREOF

Title (de)

CYANINDERIVATE, FLUORESZIERENDE KONJUGATE DARAUS UND VERWENDUNG DAVON

Title (fr)

DÉRIVÉS DE CYANINE, CONJUGUÉS FLUORESCENTS LES CONTENANT ET LEUR UTILISATION

Publication

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Application

EP 08775696 A 20080307

Priority

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Abstract (en)

[origin: WO2008125788A1] The invention relates to a cyanine derivatives of the formula in which: the dotted lines are atoms necessary for the formation of one or two fused aromatic cycles, each cycle including 5 or 6 carbon atoms; R₁, R₂, R₃, R₄ are independently H; substituted or non substituted C₁-C₁₅ alkyl; C₁-C₆ alkoxy; C₂-C₁₂ dialkylamino; C₁-C₆ alkoxy carbonyl; C₂-C₁₂ dialkylamido; a substituted or non substituted aryl, arylalkyl or aryloxy group; a halogen atom; nitro; a L1 -W, L2-M, L2-A or L2-G group; R₅, R₆ are independently: substituted or non substituted C₁-C₁₅ alkyl; a substituted or non substituted aryl or arylalkyl group; a L1 -W, L2-M, L2-A or L2-G group; X is selected from O, S, CR₉R₁₀; Y is selected from O, S, CR₉R₁₀; R7, R8, R9, R10 are independently: substituted or non substituted C₁-C₁₅ alkyl; substituted or non substituted aryl, arylalkyl or aryloxy; a L1 -W, L2-M, L2-A or L2-G group; R₇ and R₈ and/or R₉ and R₁₀ may also form together a cycle with 5 or 6 atoms or a heterocycle including 4 to 5 carbon atoms and a hydrogen atom; B is a polymethine bridge including 1 to 5 methine groups, said groups being in particular and individually substituted or non substituted by a substituted or non substituted C₁-C₁₅ alkyl; nitro; a L1 -W, L2-M, L2-A or L2-G group, L1, L2 being binding arms; G is a reactional group; A is a coupling agent; M is a conjugated molecule; W is a phosphate or phosphonate ester (preferably diester) provided the cyanine derivative includes at least one L1 -W group and at least one L2-A, L2-G or L2-M group. The invention can be used or fluorescent compounds for marking biomolecules in cells.

IPC 8 full level

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Citation (search report)

See references of WO 2008125788A1

Citation (examination)

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- MAZIERES ET AL: "Synthesis and characterisation of new phosphonate labelled cyanines", DYES AND PIGMENTS, ELSEVIER APPLIED SCIENCE PUBLISHERS, BARKING, GB, vol. 74, no. 2, 2 February 2007 (2007-02-02), pages 404 - 409, XP005871165, ISSN: 0143-7208, DOI: 10.1016/J.DYEPIG.2006.03.003

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