

Title (en)

Sulfonamide derivatives of xanthene compounds useful as fluorescent detection reagents

Title (de)

Sulfonamidderivate von Xanthenverbindungen und deren Verwendung als fluoreszenzbasierte Markierstoffe

Title (fr)

Dérivés de sulfamide de xanthènes utiles comme réactifs fluorecsents de détection de biomolécules

Publication

EP 1947095 B9 20120613 (EN)

Application

EP 08250265 A 20080122

Priority

US 62537907 A 20070122

Abstract (en)

[origin: EP1947095A1] Compounds having the general of formula I and/or formula II wherein R₁ and R₂ are the same or different and are independently selected from the group consisting of -H, -C₁₋₁₈-alkyl or -É-sulfoalkyl; X and Y are the same or different and are independently selected from the group consisting of -O-, -OH, -SH, -NH-NH₂, -F, -Cl, -Br, -I, -O-Su (succinimidyl/sulfosuccinimidyl), -O-STP (4-sulfo-2,3,5,6-tetrafluorophenyl), -O-TFP (2,3,5,6-tetrafluorophenyl), -O-benzotriazole, -benzotriazole, -NR-CO-CH₂-I, -NR₂, -NR-biomolecule, -NR-L-COO-, -NR-L-COOH, -NR-L-COO-Su, -NR-L-COO-STP, -NR-L-COO-TFP, -NR-L-CONR₂, -NR-L-CO-biomolecule, -NR-L-CO-NH-NH₂, -NR-L-OH, -NR-L-O-phosphoramidite, -NR-L-CHO, -NR-L-maleimid, or -NR-L-NH-CO-CH₂-I; where R is equal to R₁ and R₂ and L is selected from the group consisting of a divalent linear (-CH₂)_o, o = 1 to 15), crossed, or cyclic alkane group that can be substituted by at least one atom selected from the group consisting of oxygen, substituted nitrogen, and/or sulfur, and the biomolecule is a protein, antibody, nucleotide, oligonucleotide, biotin, or hapten; Z is -O- or OH; U is -O-, -OH, or NH-L-SO₂Z; Kat is Li, Na, K, ammonium (mono-, di- or trialkyl) or another cation; An is F, Cl, Br, I, BF₄, ClO₄, CH₃CO₂, CF₃CO₂ or another anion; m is an integer from 1 - 6 necessary to compensate the negative or positive charge from the dye moiety in formula I or formula II; and n is an integer from 0 - 12; compositions containing these compounds, and methods using these compounds, are disclosed.

IPC 8 full level

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CPC (source: EP US)

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