Cyanine5 amine

http://www.lumiprobe.com/p/cy5-amine

Cyanine5 amine is a reactive dye which contains amino group, an analog of Cy5® amine. This reagent can be coupled with a variety of activated esters and other electrophilic reagents. For example, this amine can be coupled with EDC-activated carboxylic groups.

This bright and photostable dye is suitable for many different methods of fluorescence detection. Colorful fluorophore can also be easily detected in small quantities (nanomols) by naked human eye.

Cyanine5 amine structure

Cyanine5 amine absorbance and emission spectra

General properties

Appearance: dark blue powder
Molecular weight: 653.77
CAS number: 1807529-70-9
Molecular formula: C_{38}H_{54}Cl_{2}N_{4}O
IUPAC name: 3H-​Indolium, 2-​[5-​[1-​[6-​((6-​aminohexyl)​amino)​-​6-​oxohexyl]​-​1,​3-​dihydro-​3,​3-​dimethyl-​2H-​indol-​2-​ylidene]​-​1,​3-​pentadien-​1-​yl]​-​1,​3,​3-​trimethyl-
Solubility: moderate solubility in water, good in polar organic solvents (DMF, DMSO, alcohols)
Quality control: NMR \textsuperscript{1}H, HPLC-MS (95%)
Storage conditions: Storage: 24 months after receival at -20°C in the dark. Transportation: at room temperature for up to 3 weeks. Avoid prolonged exposure to light.

Spectral properties

Excitation/absorption maximum, nm: 646
\varepsilon, \text{L} \cdot \text{mol}^{-1} \cdot \text{cm}^{-1}: 250000
Emission maximum, nm: 662
Fluorescence quantum yield: 0.2
CF\textsubscript{260}: 0.03
CF\textsubscript{280}: 0.04

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