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.

Structure of Cyanine5 amine

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-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 ¹H, 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
- **ε, L⋅mol⁻¹⋅cm⁻¹:** 250000
- **Emission maximum, nm:** 662
- **Fluorescence quantum yield:** 0.2
- **CF₂60⁺:** 0.03
- **CF₂80⁺:** 0.04

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