Sulfo-Cyanine5.5 NHS ester

Sulfo-Cyanine5.5 NHS ester is an amine reactive activated ester of sulfonated far red Cyanine5.5 fluorophore, an analog of Cy5.5®. This is a reagent of choice for the labeling of antibodies, sensitive proteins, and others which require reactions in purely aqueous environment, or without any significant additions of organic co-solvents.

The dye is well suitable for non-invasive in vivo NIR imaging, and for the applications requiring low fluorescent background.

Structure of sulfo-Cyanine5.5 NHS ester

Absorption and emission spectra of sulfo-Cyanine5.5 fluorophore

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**General properties**

- **Appearance:** dark blue solid
- **Mass spec M+ increment:** 884.15
- **Molecular weight:** 1114.37
- **Molecular formula:** C_{44}H_{42}N_{3}K_{3}O_{16}S_{4}
- **Solubility:** good in water, DMF, DMSO
- **Quality control:** NMR \(^1\)H, HPLC-MS (95%)
- **Storage conditions:** Storage: 12 months after receipt at -20°C in the dark. Transportation: at room temperature for up to 3 weeks. Avoid prolonged exposure to light. Desiccate.

**Spectral properties**

- **Excitation maximum, nm:** 675
- **\(\varepsilon, \text{L}\cdot\text{mol}^{-1}\cdot\text{cm}^{-1}\):** 195000
- **Emission maximum, nm:** 694
- **CF\(_{660}\):** 0.09
- **CF\(_{280}\):** 0.11

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