

## sulfo-Cyanine5 NHS ester

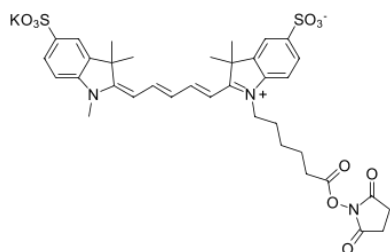
<http://www.lumiprobe.com/p/sulfo-cy5-nhs-ester>

Water-soluble Cyanine5 succinimidyl ester (SE), an equivalent of Cy5<sup>®</sup> NHS ester, for the labeling of various amine-containing molecules in aqueous phase without use of any organic co-solvent. This product is, therefore, particularly useful for the labeling of proteins that denature in the presence of organic co-solvents, as well as for proteins with low solubility.

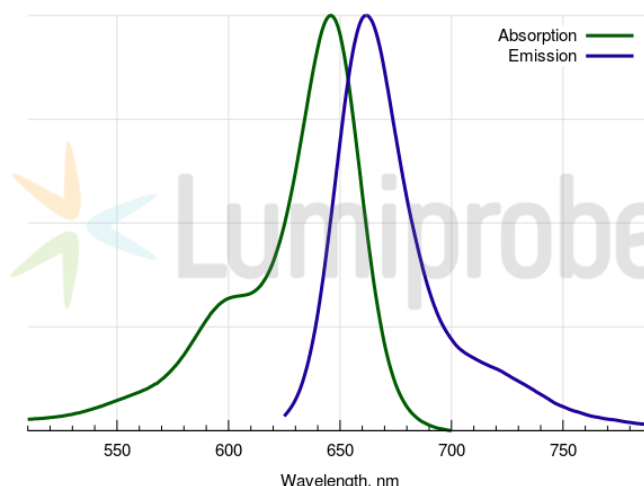
sulfo-Cyanine 5 is an analog of Cy5<sup>®</sup>, one of the most popular fluorophores, which is compatible with various equipment such as plate readers, microscopes, and imagers.

This dye is highly hydrophilic and water-soluble. A [non-sulfonated analog](#) is also available.

Can be used as a replacement for Cy5<sup>®</sup>, DyLight 649 for all applications.



**sulfo-Cyanine5 NHS ester structure**



**sulfo-Cyanine5 absorbance and emission spectra**

### General properties

|                     |                                                                                                                                                             |
|---------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Appearance:         | dark blue powder                                                                                                                                            |
| Molecular weight:   | 777.95                                                                                                                                                      |
| CAS number:         | 2230212-27-6; 146368-14-1 (N-Ethyl)                                                                                                                         |
| Molecular formula:  | C <sub>36</sub> H <sub>40</sub> N <sub>3</sub> KO <sub>10</sub> S <sub>2</sub>                                                                              |
| Solubility:         | very good in water, good in DMF and DMSO                                                                                                                    |
| Quality control:    | NMR <sup>1</sup> 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/absorption maximum, nm:         | 646    |
| ε, L·mol <sup>-1</sup> ·cm <sup>-1</sup> : | 271000 |
| Emission maximum, nm:                      | 662    |
| Fluorescence quantum yield:                | 0.28   |
| CF <sub>260</sub> :                        | 0.04   |
| CF <sub>280</sub> :                        | 0.04   |

Cy<sup>®</sup> is a trademark of Cytiva.