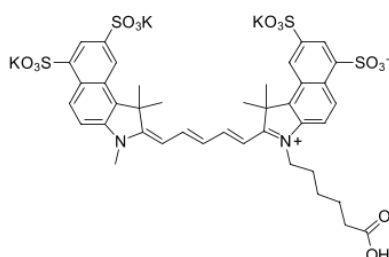


## sulfo-Cyanine5.5 carboxylic acid

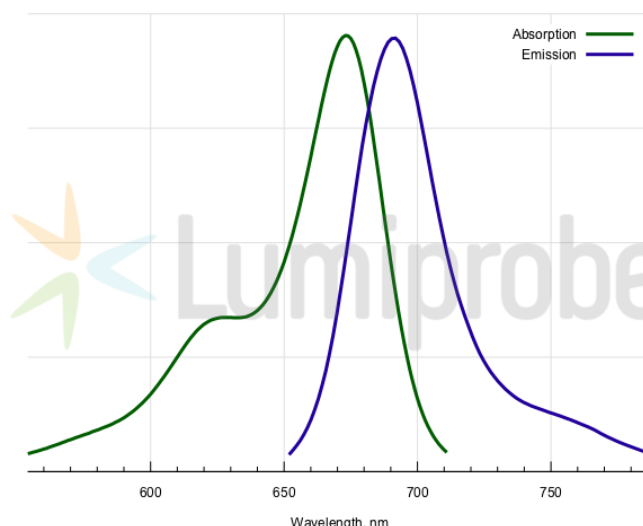
<http://www.lumiprobe.com/p/sulfo-cy55-carboxylic-acid>

sulfo-Cyanine5.5 (analog of Cy5.5®) is a water-soluble, far-red emitting fluorophore. Due to four sulfo groups, the dye possesses a negative charge in neutral pH, and very high hydrophilicity. As a cyanine dye, sulfo-Cyanine5.5 shows a very low dependence of the fluorescence on pH, and a very high extinction coefficient.

This product is a free non-activated carboxylic acid that can be used for calibration and as a non-reactive control.



**Structure of Sulfo-Cyanine5.5 carboxylic acid**



**Sulfo-Cyanine5.5 absorption and emission spectra**

### General properties

|                     |                                                                                                                                                                                                                                                                                                                                                                                                                                |
|---------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Appearance:         | dark blue solid                                                                                                                                                                                                                                                                                                                                                                                                                |
| Molecular weight:   | 1017.31                                                                                                                                                                                                                                                                                                                                                                                                                        |
| CAS number:         | 2183440-68-6 (inner salt)                                                                                                                                                                                                                                                                                                                                                                                                      |
| Molecular formula:  | C <sub>40</sub> H <sub>39</sub> K <sub>3</sub> N <sub>2</sub> O <sub>14</sub> S <sub>4</sub>                                                                                                                                                                                                                                                                                                                                   |
| Solubility:         | Well soluble in water, DMF, DMSO (0.39 M = 400 g/L)                                                                                                                                                                                                                                                                                                                                                                            |
| Quality control:    | NMR <sup>1</sup> H, HPLC-MS (95%)                                                                                                                                                                                                                                                                                                                                                                                              |
| Storage conditions: | Storage: 24 months after receipt at -20°C in the dark. Transportation: at room temperature for up to 3 weeks. Avoid prolonged exposure to light. Desiccate.                                                                                                                                                                                                                                                                    |
| Legal statement:    | This Product is offered and sold for research purposes only. It has not been tested for safety and efficacy in food, drug, medical device, cosmetic, commercial or any other use. Supply does not express or imply authorization to use for any other purpose, including, without limitation, in vitro diagnostic purposes, in the manufacture of food or pharmaceutical products, in medical devices or in cosmetic products. |

### Spectral properties

|                                            |        |
|--------------------------------------------|--------|
| Excitation/absorption maximum, nm:         | 673    |
| ε, L·mol <sup>-1</sup> ·cm <sup>-1</sup> : | 211000 |
| Emission maximum, nm:                      | 691    |
| Fluorescence quantum yield:                | 0.21   |
| CF <sub>260</sub> :                        | 0.09   |
| CF <sub>280</sub> :                        | 0.11   |