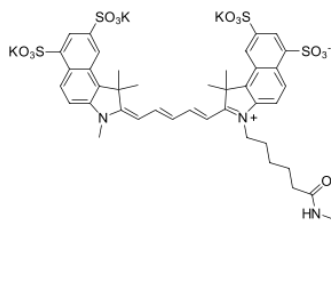


sulfo-Cyanine5.5 maleimide

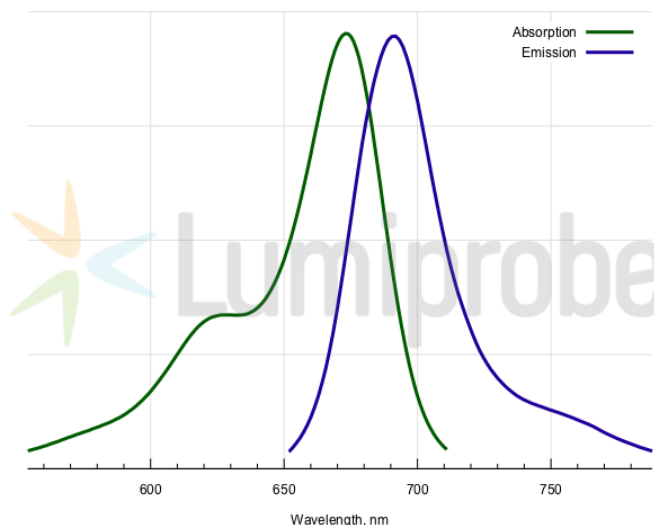
<http://www.lumiprobe.com/p/sulfo-cy55-maleimide>

sulfo-Cyanine5.5 dye is a water-soluble far-red to NIR emitting dye that is very hydrophilic due to the presence of four sulfo groups. sulfo-Cyanine5.5 derivatives exhibit high water solubility. The dye is perfect for labeling sensitive proteins, nanoparticles, and highly hydrophilic biopolymers.

This maleimide is a thiol-reactive dye that selectively labels cysteine residues. Disulfide bonds of native proteins should be reduced with an appropriate reducing agent, such as TCEP, according to our recommended protocol.



Structure of Sulfo-Cyanine5.5 maleimide



Absorption and emission spectra of sulfo-Cyanine5.5

General properties

| | |
|-------------------------|---|
| Appearance: | dark colored solid |
| Mass spec M+ increment: | 1024.2 |
| Molecular weight: | 1139.43 |
| CAS number: | 2183440-58-4 (potassium salt); 2183440-57-3 (inner salt) |
| Molecular formula: | C ₄₆ H ₄₅ K ₃ N ₄ O ₁₅ S ₄ |
| Solubility: | good in water, DMSO, DMF |
| 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/absorption maximum, nm: | 673 |
| ε, L·mol ⁻¹ ·cm ⁻¹ : | 211000 |
| Emission maximum, nm: | 691 |
| Fluorescence quantum yield: | 0.21 |
| CF ₂₆₀ : | 0.09 |
| CF ₂₈₀ : | 0.11 |