

Lumiprobe Corporation

201 International Circle, Suite 135 Hunt Valley, Maryland 21030

USA

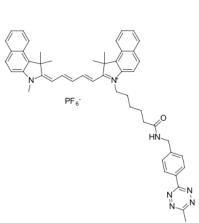
Phone: +1 888 973 6353 Fax: +1 888 973 6354 Email: order@lumiprobe.com

Cyanine 5.5 tetrazine

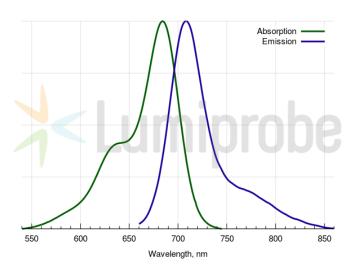
http://www.lumiprobe.com/p/cy55-tetrazine

Cyanine 5.5 is a far red emitting dye for *in vivo* imaging and applications requiring low background. This Cyanine 5.5 derivative contains tetrazine moiety that reacts with trans-cyclooctenes, cyclopropenes, and some strained cyclooctynes to form stable conjugates.

This labeling reaction is extremely fast and can be used in vivo.



Structure of Cyanine5.5 tetrazine



Absorption and emission spectra of Cyanine 5.5

General properties

Appearance: dark blue solid

 $\begin{array}{ll} \text{Mass spec M+ increment:} & 737.4 \\ \text{Molecular weight:} & 911.96 \\ \text{Molecular formula:} & C_{50}\text{H}_{52}\text{N}_7\text{F}_6\text{OP} \end{array}$

Solubility: good in DCM, DMF, DMSO

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. Desiccate.

Spectral properties

Excitation/absorption maximum, nm: 684 ϵ , $L \cdot mol^{-1} \cdot cm^{-1}$: 198000 Emission maximum, nm: 710 Fluorescence quantum yield: 0.2 CF_{260} : 0.07 CF_{280} : 0.03