

Lumiprobe Corporation

115 Airport Dr Suite 160 Westminster, Maryland 21157

USA

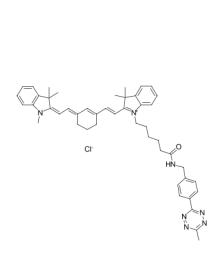
Phone: +1 888 973 6353 Fax: +1 888 973 6354 Email: order@lumiprobe.com

Cyanine7 tetrazine

http://www.lumiprobe.com/p/cy7-tetrazine

TCO ligation is a reaction that takes place between a tetrazine and a strained olefin, such as trans-cyclooctene.

This tetrazine bears a fragment of near infrared dye, Cyanine7. This NIR fluorophore is especially useful for in vivo imaging.



Absorption Emission

Absorption

Emission

800 850

Wavelength, nm

Structure of Cyanine7 tetrazine

Absorption and emission spectra of Cyanine7

General properties

Appearance: dark colored solid

 $\begin{array}{ll} \text{Mass spec M+ increment:} & 703.4 \\ \\ \text{Molecular weight:} & 877.94 \\ \\ \text{Molecular formula:} & C_{47}H_{54}N_7F_6OP \end{array}$

Solubility: good in DMF, DMSO, DCM

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: 750 ϵ , L·mol $^{-1}$ ·cm $^{-1}$: 199000 Emission maximum, nm: 773 CF_{260} : 0.022 CF_{280} : 0.029