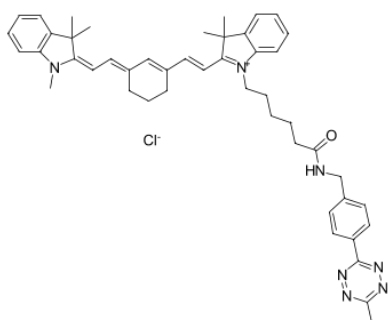


## Cyanine7 tetrazine

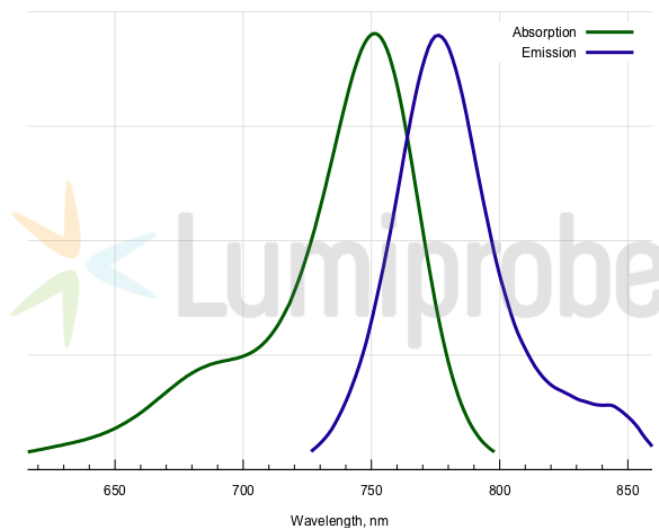
<http://www.lumiprobe.com/p/cy7-tetrazine>

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.



Structure of Cyanine7 tetrazine



Absorption and emission spectra of Cyanine7

### General properties

Appearance:	dark colored solid
Mass spec M+ increment:	703.4
Molecular weight:	877.94
Molecular formula:	C <sub>47</sub> H <sub>54</sub> N <sub>7</sub> F <sub>6</sub> OP
Solubility:	good in DMF, DMSO, DCM
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.

### Spectral properties

Excitation/absorption maximum, nm:	750
ε, L·mol <sup>-1</sup> ·cm <sup>-1</sup> :	199000
Emission maximum, nm:	773
CF <sub>260</sub> :	0.022
CF <sub>280</sub> :	0.029