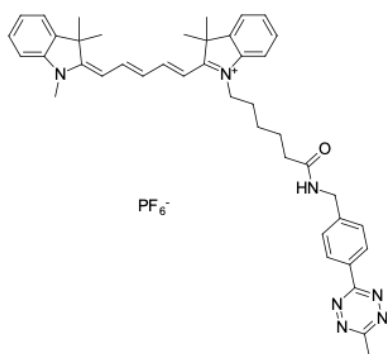


## Cyanine5 tetrazine

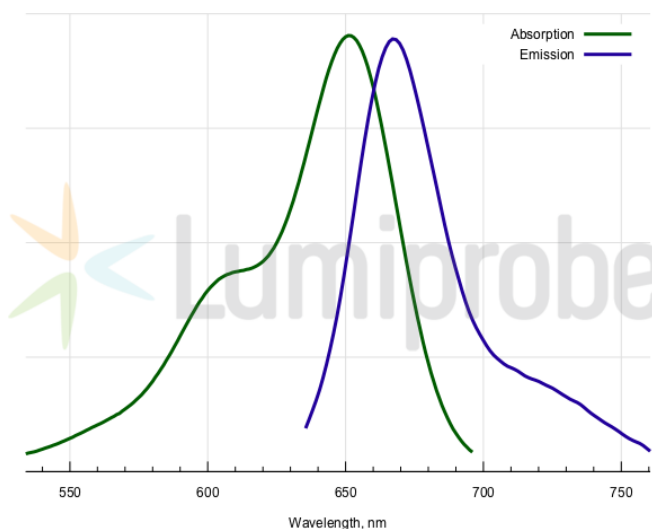
<http://www.lumiprobe.com/p/cyanine5-tetrazine>

Tetrazine-cyclooctene (TCO) ligation is one of the fastest bioconjugation reactions known to date. In order to use it for fluorescent labeling, a fluorescent reporter molecule bearing one of the reacting groups is necessary.

Cyanine5 tetrazine is a molecule bearing Cyanine5 fluorophore, and tetrazine moiety. Cyanine5 is a very popular fluorophore compatible with numerous instruments.



Structure of Cyanine5 tetrazine



Absorption and emission spectra of Cyanine5

### General properties

Appearance:	dark blue solid
Mass spec M+ increment:	637.4
Molecular weight:	811.84
Molecular formula:	C <sub>42</sub> H <sub>48</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:	646
ε, L·mol <sup>-1</sup> ·cm <sup>-1</sup> :	250000
Emission maximum, nm:	662
Fluorescence quantum yield:	0.2
CF <sub>260</sub> :	0.03
CF <sub>280</sub> :	0.04