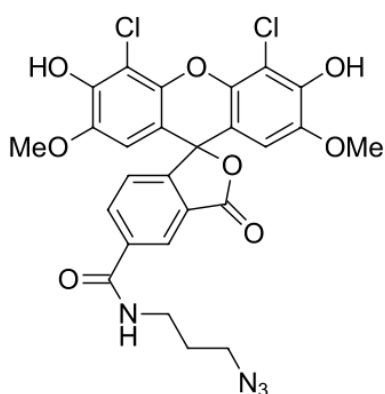


## JOE azide, 5-isomer

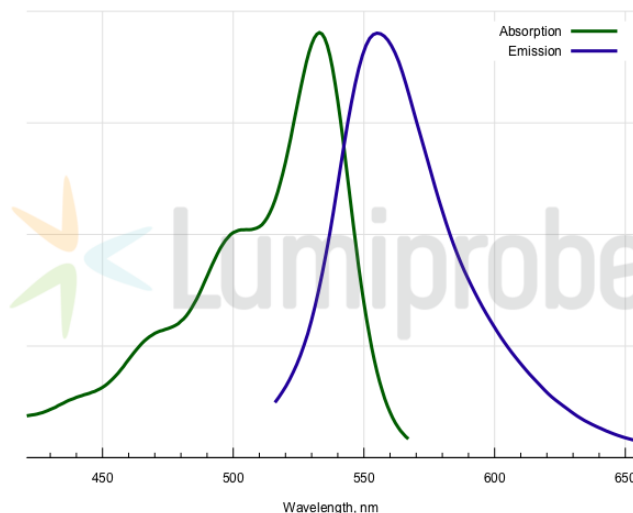
<http://www.lumiprobe.com/p/joe-azide-5>

JOE is a fluorescent dye with the emission in yellow region of the spectrum. The fluorophore matches channel of HEX dye, another chlorinated fluorescein.

JOE dye is often used in qPCR; oligo labeling can be achieved using click chemistry. This is an azide derivative of JOE for click chemistry, pure 5-isomer.



**Structure of 5-JOE azide**



**Absorption and emission spectra of JOE dye**

### General properties

Appearance:	red solid
Mass spec M+ increment:	586.1
Molecular weight:	587.37
CAS number:	1422178-11-7
Molecular formula:	C <sub>26</sub> H <sub>20</sub> N <sub>4</sub> Cl <sub>2</sub> O <sub>8</sub>
Solubility:	good in DMF, DMSO
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.
Legal statement:	This Product is offered and sold for research purposes only. It has not been tested for safety and efficacy in food, drug, medical device, cosmetic, commercial or any other use. Supply does not express or imply authorization to use for any other purpose, including, without limitation, in vitro diagnostic purposes, in the manufacture of food or pharmaceutical products, in medical devices or in cosmetic products.

### Spectral properties

Excitation/absorption maximum, nm:	533
ε, L·mol <sup>-1</sup> ·cm <sup>-1</sup> :	75000
Emission maximum, nm:	554
Fluorescence quantum yield:	0.61
CF <sub>260</sub> :	0.36
CF <sub>280</sub> :	0.28