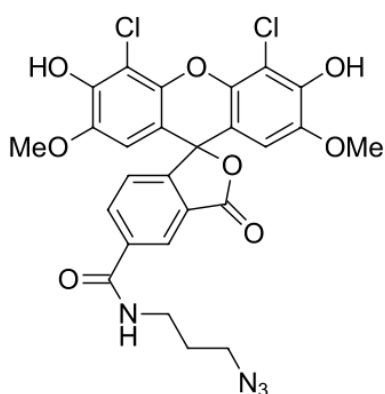


JOE azide, 5- isomer

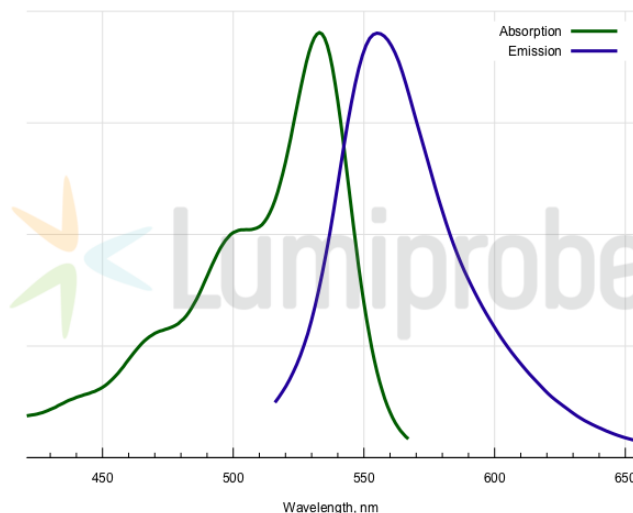
<http://www.lumiprobe.com/p/joe-azide-5>

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 ₂₆ H ₂₀ N ₄ Cl ₂ O ₈
Solubility:	good in DMF, DMSO
Quality control:	NMR ¹ 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:	533
ε, L·mol ⁻¹ ·cm ⁻¹ :	75000
Emission maximum, nm:	554
Fluorescence quantum yield:	0.61
CF ₂₆₀ :	0.36
CF ₂₈₀ :	0.28