

## **Lumiprobe Corporation**

201 International Circle, Suite 135 Hunt Valley, Maryland 21030

USA

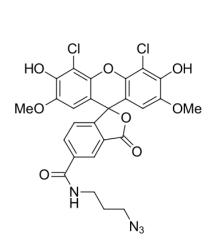
Phone: +1 888 973 6353 Fax: +1 888 973 6354 Email: order@lumiprobe.com

## JOE azide, 5-isomer

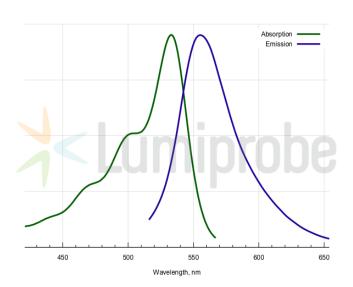
http://www.lumiprobe.com/p/joe-azide-5

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:  $C_{26}H_{20}N_4Cl_2O_8$ 

Solubility: good in DMF, DMSO

Quality control: NMR <sup>1</sup>H, 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: 533  $\epsilon$ , L·mol $^{-1}$ ·cm $^{-1}$ : 75000 Emission maximum, nm: 554 Fluorescence quantum yield: 0.61  $CF_{260}$ : 0.36  $CF_{280}$ : 0.28