

JOE NHS ester, 5-isomer

http://www.lumiprobe.com/p/joe-nhs-ester-5

JOE is a fluorescein-derived xanthene dye containing methoxy groups and chlorine atoms. Its absorption and emission spectra are between FAM and TAMRA/ROX channels. For this reason, this fluorophore is often used for multiplex detection, including DNA sequencing.

This derivative is an activated N-hydroxysuccinimide ester used to label proteins, peptides, amino-modified oligonucleotides, and other target molecules via conjugation with amines.



Structure of JOE NHS ester, 5-isomer

General properties

Appearance:	orange powder
Molecular weight:	602.33
CAS number:	113394-24-4
Molecular formula:	$C_{27}H_{17}CI_2NO_{11}$
Quality control:	NMR ¹ H and HPLC-MS (95+%)
Storage conditions:	12 months after receival at -20°C in the dark. Transportation: at room temperature for up to 3 weeks. Desiccate. Avoid prolonged exposure to light.

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	