

AF 594 azide

http://www.lumiprobe.com/p/af-594-azide-6

AF 594 is a water-soluble red-fluorescent dye with high fluorescence quantum yield and high photostability. The dye is similar to Texas Red in spectral characteristics (absorption max. at 586 nm, emission max. at 613 nm) and is not sensitive to pH changes within the range from 4 to 10.

AF 594 azide is a fluorescently labeled azide that reacts with alkynyl derivatives of biomolecules (terminal alkynes and cyclooctynes) via click reactions to form stable adducts. AF 594 azide is commonly used for bioconjugation tasks and labeling of cells in flow cytometry, fluorescent microscopy, and other applications.



Structure of AF 594 azide, 6-isomer

General properties

Appearance:	dark-blue crystals
Molecular weight:	842.98
Molecular formula:	$C_{38}H_{39}KN_6O_{10}S_2$
Solubility:	good in water, DMF, DMSO
Quality control:	NMR ¹ H and HPLC-MS (95+%)
Storage conditions:	24 months after receival at -20°C in the dark. Transportation: at room temperature for up to 3 weeks. Desiccate. Avoid prolonged exposure to light.
Legal statement:	Product is offered and sold for research purposes only. Product is not tested for safety and efficacy in food, drug, medical device, cosmetic, no express or implied authorization to use for any other purpose, including, without limitation, in vitro diagnostic purposes, for humans or animals or for commercial purposes.

Spectral properties

Excitation/absorption maximum, nm:	586
ε, L·mol ⁻¹ ·cm ⁻¹ :	105000
Emission maximum, nm:	613
Fluorescence quantum yield:	0.77
CF ₂₆₀ :	0.28
CF ₂₈₀ :	0.51

Absorption and emission spectra of AF 594