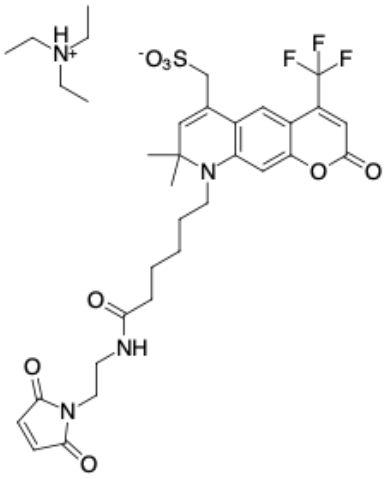
Lumiprobe Corporation
201 International Circle, Suite 135
Hunt Valley, Maryland 21030
USA
Phone: +1 888 973 6353
Fax: +1 888 973 6354
Email: order@lumiprobe.com

AF430 maleimide

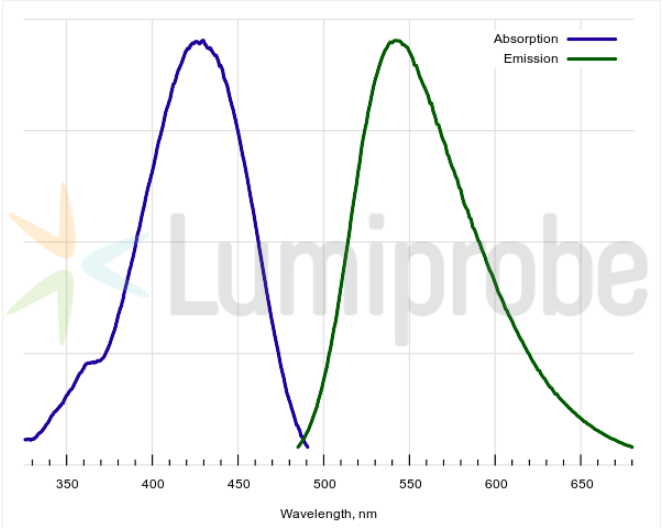
http://www.lumiprobe.com/p/alexa-fluor-430-maleimide

AF430 is a hydrophilic dye of coumarin nature, structurally identical to Alexa Fluor® 430. The dye is used in flow cytometry.

This maleimide derivative is reactive against thiol groups. Therefore, it allows to label many proteins, including those residing on cell surface.



Structure of AF430 maleimide



Absorption and emission spectra of AF430

General properties

Appearance:	yellow solid
Mass spec M+ increment:	625.2
Molecular weight:	726.8
Molecular formula:	$C_{34}H_{45}N_4F_3O_8S$
IUPAC name:	(8-{6-[2-(2,5-Dioxo-1H-pyrrol-1-yl)ethylamino]-6-oxohexyl}-7,7-dimethyl-2-oxo-4-(trifluoromethyl)-1-oxa-8-aza-5,6,7,8-tetrahydroanthr-5-yl)methanesulfonic acid
Solubility:	soluble in water, polar organic solvents (DMF, DMSO)
Quality control:	NMR ^{1}H, HPLC-MS (95%)
Storage conditions:	Storage: 12 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:	430
ε, L·mol^{-1}·cm^{-1}:	15955
Emission maximum, nm:	542
Fluorescence quantum yield:	0.23
CF_{260}:	0.06
CF_{280}:	0.06