

AF 594 biocytin

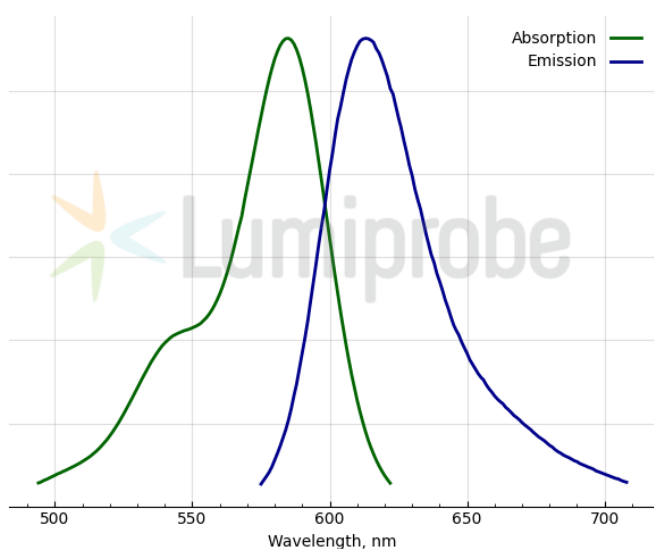
<http://www.lumiprobe.com/p/biocytin-af-594>

AF 594 biocytin is a cell-impermeant polar tracer. It consists of AF 594 dye, biotin, and aldehyde-fixable primary amine.

AF 594 is a bright, photostable red fluorophore with spectral characteristics similar to Texas Red (absorption max. at 586 nm, emission max. at 613 nm). Biotin allows the detection of the tracer with enzyme-containing streptavidin and subsequent amplification.

Polar tracers are water-soluble and can be introduced into cells by iontophoresis, patch clamping, osmotic lysis of pinocytotic vesicles, and other comparable methods. AF 594 biocytin can be used to examine plasma membrane permeability, pinocytosis, transport through gap junctions, and cell-cell or cell-liposome fusion. It can also be used as a retrograde and anterograde neuronal tracer in live tissue.

Stock solution can be prepared in DMSO or DMF before use.



Absorption and emission spectra of AF 594

General properties

Appearance:	blue solid
Molecular weight:	1279.66
Molecular formula:	$C_{63}H_{90}N_8O_{14}S_3$
Solubility:	soluble in water, DMSO, DMF
Quality control:	NMR 1H and HPLC-MS (95+%)
Storage conditions:	24 months after receipt at $-20^\circ C$ in the dark. Transportation: at room temperature for up to 3 weeks. Desiccate. Avoid prolonged exposure to light.
Legal statement:	This Product is offered and sold for research purposes only. It has not been tested for safety and efficacy in food, drug, medical device, cosmetic, commercial or any other use. Supply does not express or imply authorization to use for any other purpose, including, without limitation, in vitro diagnostic purposes, in the manufacture of food or pharmaceutical products, in medical devices or in cosmetic products.

Spectral properties

Excitation/absorption maximum, nm:	586
ϵ , $L \cdot mol^{-1} \cdot cm^{-1}$:	105000
Emission maximum, nm:	613

Fluorescence quantum yield:	0.77
CF ₂₆₀ :	0.28
CF ₂₈₀ :	0.51