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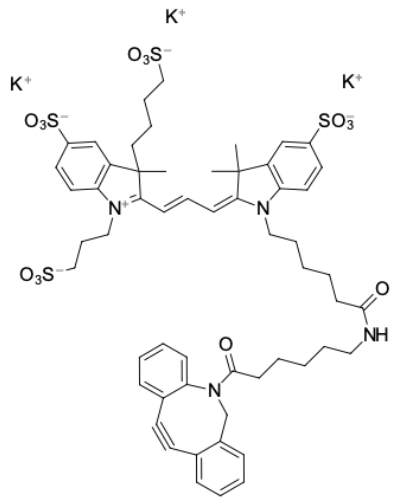
AF 555 DBCO

http://www.lumiprobe.com/p/af-555-dbco

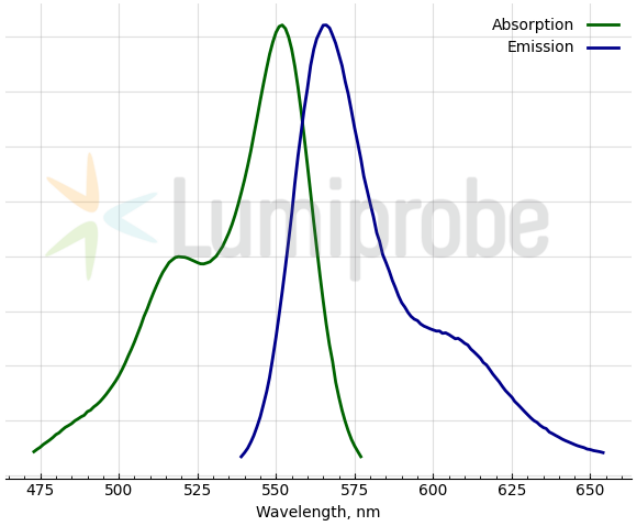
Dibenzocyclooctyne (DBCO, DBCO, ADIBO) is one of the most reactive cycloalkynes for copper-free click reaction (SPAAC, strain-promoted azide-alkyne cycloaddition). The rate of interaction of DBCO with azides is significantly higher than that of other cyclooctynes, as well as Cu-catalyzed click reaction (CuAAC). Unlike other cyclooctynes, DBCO does not interact with tetrazines, which makes it possible to use it in bioorthogonal reactions together with trans-cyclooctenes and tetrazines.

AF 555 is a hydrophilic fluorophore with high fluorescence quantum yield and high photostability, an alternative to tetramethylrhodamine (TAMRA, TMR) or Cyanine3 dyes.

AF 555 DBCO allows fluorescent labeling of azide-containing biomolecules inside living cells, whole organisms, and inanimate samples.



Structure of AF 555 DBCO



Absorption and emission spectra of AF 555

General properties

Appearance:	purple powder
Molecular weight:	1279.71
Molecular formula:	$C_{56}H_{65}K_3N_4O_{15}S_4$
Solubility:	water, DMSO, DMF
Quality control:	NMR ^1H 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.
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:	552
ε, $L \cdot mol^{-1} \cdot cm^{-1}$:	152000
Emission maximum, nm:	566
Fluorescence quantum yield:	0.14