

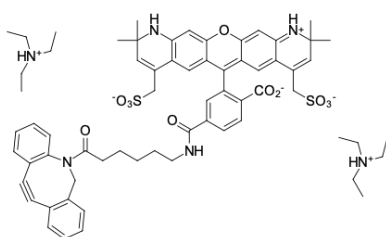
AF 568 DBCO

<http://www.lumiprobe.com/p/af-568-dbc-6>

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 568 is a bright, photostable, and hydrophilic fluorophore that emits in the orange channel. The absorption maximum is 572 nm. The emission maximum is 598 nm.

AF 568 DBCO allows fluorescent labeling of azide-containing biomolecules inside living cells and whole organisms without the negative effect of copper ions on them, and inanimate samples.



Structure of AF 568 DBCO, 6-isomer

General properties

Appearance:	dark violet solid
Molecular weight:	1197.53
Molecular formula:	$C_{66}H_{80}N_6O_{11}S_2$
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:	572
ϵ , $L \cdot mol^{-1} \cdot cm^{-1}$:	94238
Emission maximum, nm:	598
Fluorescence quantum yield:	0.912