

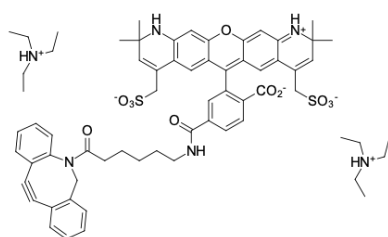
## AF 568 DBCO

<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 <sub>66</sub> H <sub>80</sub> N <sub>6</sub> O <sub>11</sub> S <sub>2</sub>
Quality control:	NMR <sup>1</sup> H and HPLC-MS (95+%)
Storage conditions:	24 months after receipt at -20°C in the dark. Transportation: at room temperature for up to 3 weeks. Desiccate. Avoid prolonged exposure to light.

### Spectral properties

Excitation/absorption maximum, nm:	572
ε, L·mol <sup>-1</sup> ·cm <sup>-1</sup> :	94238
Emission maximum, nm:	598
Fluorescence quantum yield:	0.912