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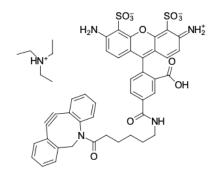
AF 488 DBCO

http://www.lumiprobe.com/p/af-488-dbco-5

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 488 is sulfonated rhodamine, a bright, photostable, and hydrophilic fluorophore that emits in the green channel. The absorption maximum is 495 nm. The emission maximum is 519 nm.

AF 488 DBCO allows fluorescent labeling of azide-containing biomolecules inside living cells, whole organisms, and inanimate samples.



Structure of AF 488 DBCO, 5-isomer

General properties

Appearance: orange solid Molecular weight: 936.08 Molecular formula: $C_{48}H_{49}N_5O_{11}S_2$

Solubility: water, DMSO, DMF, methanol 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. 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: 495
Emission maximum, nm: 519
Fluorescence quantum yield: 0.91