

## Cyanine3.5 DBCO

http://www.lumiprobe.com/p/cyanine35-dbco

Cyanine3.5 is a bright and photostable fluorophore, which is similar in its spectral characteristics to Cy3.5<sup>™</sup> dye. Cyanine3.5 DBCO fluorescence maximum is at 604 nm and in the orange-red spectrum range.

Cyanine3.5 fluorescence is pH insensitive in the range from 4 to 10 and can be detected in the spectrum range with a low level of autofluorescence of biological samples.

Cyanine3.5 DBCO (dibenzocyclooctyne) easily forms conjugates with azide derivatives of biomolecules in copper-free Click Chemistry. The process runs without catalysts or increased temperature, resulting in stable triazoles.

Conjugates of biomolecules with Cyanine3.5 can be used for various microscopy assays, including FRET-microscopy, and in proteomics.



Structure of Cyanine3.5 DBCO



Absorption and emission spectra of Cyanine3.5

General properties	
Appearance:	dark violet solid
Molecular weight:	944.95
Molecular formula:	$C_{59}H_{61}N_4BF_4O_2$
Solubility:	soluble in organic solvents (DMF, DMSO, dichloromethane), insoluble in water
Quality control:	NMR <sup>1</sup> H, HPLC-MS (95%)
Storage conditions:	Storage: 24 months after receival at -20°C in the dark. Transportation: at room temperature for up to 3 weeks. Avoid prolonged exposure to light.

## **Spectral properties**

Excitation/absorption maximum, nm:	591
ε, L·mol <sup>-1</sup> ·cm <sup>-1</sup> :	116000
Emission maximum, nm:	604
Fluorescence quantum yield:	0.35

Cy<sup>™</sup> is a registered trademark of Cytiva in some countries.