

## Cyanine3.5 DBCO

<http://www.lumiprobe.com/p/cyanine35-dbc>

Cyanine3.5 is a bright and photostable fluorophore, which is similar in its spectral characteristics to Cy3.5™ 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

#### General properties

Appearance:	dark violet solid
Molecular weight:	944.95
Molecular formula:	C <sub>59</sub> H <sub>61</sub> N <sub>4</sub> BF <sub>4</sub> O <sub>2</sub>
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 receipt 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
CF <sub>260</sub> :	0.29
CF <sub>280</sub> :	0.22

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