

## Cyanine5.5 DBCO

http://www.lumiprobe.com/p/cy55-dbco

Strain promoted alkyne azide cycloaddition (SPAAC) between strained cycloalkynes and azides is a useful bioconjugation method that eliminates the need for copper catalyst necessary for classical CuAAC click chemistry.

Cyanine5.5 DBCO is a cyclooctyne product containing Cyanine5.5 fluorescent dye. This fluorophore is used in bioimaging, biodistribution studies, and microscopy.

Cyanine5.5 DBCO can be used to conjugate the fluorophore with various azides.





Structure of Cyanine5.5 DBCO

Absorption and emission spectra of Cyanine5.5

| General properties      |  |
|-------------------------|--|
| Appearance:             | dark colored solid   |
| Mass spec M+ increment: | 882.5  |
| Molecular weight:       | 1029.14  |
| CAS number:             | 2643308-61-4   |
| Molecular formula:      | $C_{61}H_{63}N_4F_6O_2P$   |
| Solubility:             | good in DMF, DMSO, chlorinated organic solvents  |
| 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. Desiccate. |

## **Spectral properties**

| Excitation/absorption maximum, nm:         | 684    |
|--|--------|
| ε, L·mol <sup>-1</sup> ·cm <sup>-1</sup> : | 198000 |
| Emission maximum, nm:                      | 710    |
| Fluorescence quantum yield:                | 0.2    |