

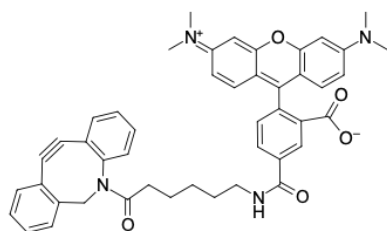
TAMRA DBCO, 5-isomer

<http://www.lumiprobe.com/p/tamra-dbc-5>

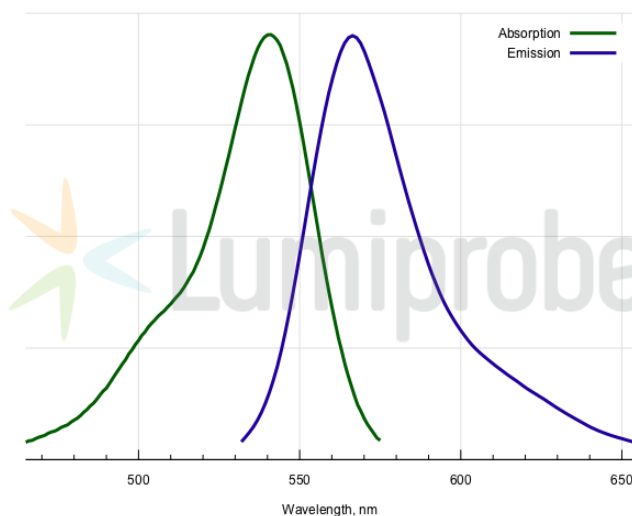
This product is a derivative of tetramethylrhodamine (TMR, TAMRA) containing a cyclooctyne moiety (dibenzocyclooctyne, DBCO). Pure 5-isomer.

DBCO reacts quickly and efficiently with azides by simply mixing the components without the need for a copper catalyst (so-called sterically promoted cycloaddition reaction (SPAAC)).

TAMRA DBCO can be used for the labeling of proteins, peptides, nucleic acids, and other molecules containing azide groups. TAMRA is often used as a FRET acceptor for [FAM](#) fluorophore. Can replace DyLight 549.



Structure of TAMRA DBCO, 5-isomer



Absorption and emission spectra of 5-TAMRA

General properties

| | |
|---------------------|--|
| Appearance: | dark colored solid |
| Molecular weight: | 730.87 |
| CAS number: | 1911598-65-6 |
| Molecular formula: | C ₄₆ H ₄₂ N ₄ O ₅ |
| Solubility: | in DMSO, DMF |
| Quality control: | NMR ¹ 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: | 541 |
| ε, L·mol ⁻¹ ·cm ⁻¹ : | 84000 |
| Emission maximum, nm: | 567 |
| Fluorescence quantum yield: | 0.1 |