

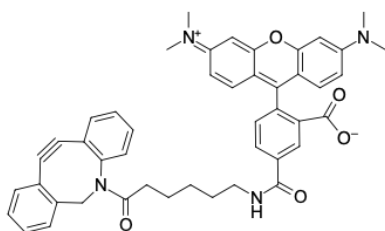
TAMRA DBCO, 5-isomer

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

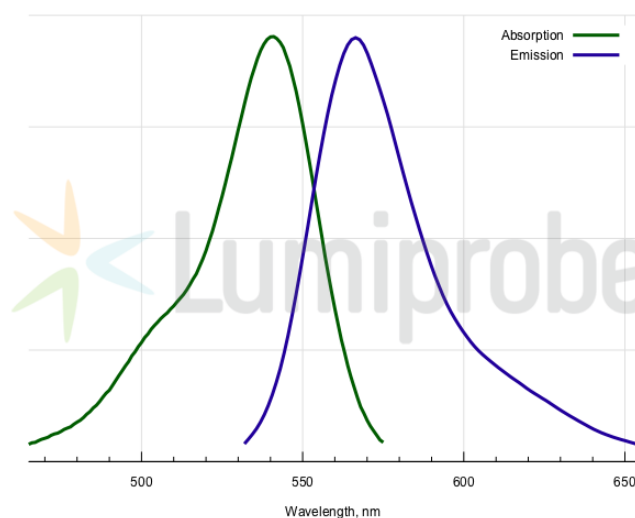
This product is a derivative of tetramethylrhodamine (TMR, TAMRA) containing a cyclooctyne moiety (dibenzocyclooctyne, DBCO). Pure 5-isomer.

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:	$C_{46}H_{42}N_4O_5$
Solubility:	in DMSO, DMF
Quality control:	NMR 1H and HPLC-MS (95+%)
Storage conditions:	24 months after receipt at $-20^\circ C$ 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 , $L \cdot mol^{-1} \cdot cm^{-1}$:	84000
Emission maximum, nm:	567
Fluorescence quantum yield:	0.1