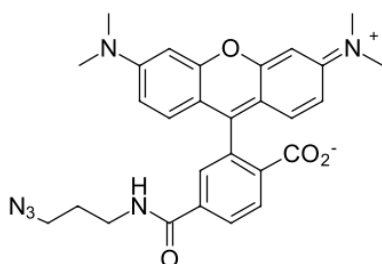


TAMRA azide, 6-isomer

<http://www.lumiprobe.com/p/tamra-azide-6>

Tetramethylrhodamine (TAMRA) is a xanthene dye with orange emission. The dye is a FRET acceptor for FAM and is sometimes used as a quencher of FAM.

Like other xanthenes, TAMRA exists as two isomers (5- and 6-) with very similar spectral properties. This is an azide derivative of the 6-isomer of TAMRA. The azide can be conjugated with terminal alkynes using copper-catalyzed click chemistry (CuAAC) or with cycloalkynes with copper-free strain-promoted alkyne azide cycloaddition (SPAAC) reaction.



Structure of 6-TAMRA azide

General properties

Appearance:	violet solid / solution
Mass spec M+ increment:	512.2
Molecular weight:	512.56
CAS number:	1192590-89-8
Molecular formula:	C ₂₈ H ₂₈ N ₆ O ₄
Solubility:	Good in DMF, DMSO, alcohols, low solubility in water
Quality control:	NMR ¹ 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. Desiccate.
Legal statement:	This Product is offered and sold for research purposes only. It has not been tested for safety and efficacy in food, drug, medical device, cosmetic, commercial or any other use. Supply does not express or imply authorization to use for any other purpose, including, without limitation, in vitro diagnostic purposes, in the manufacture of food or pharmaceutical products, in medical devices or in cosmetic products.

Spectral properties

Excitation/absorption maximum, nm:	541
ε, L·mol ⁻¹ ·cm ⁻¹ :	84000
Emission maximum, nm:	567
Fluorescence quantum yield:	0.1
CF ₂₆₀ :	0.32
CF ₂₈₀ :	0.19