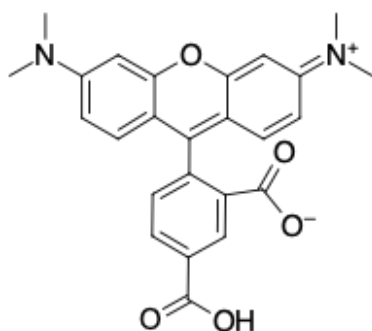


TAMRA carboxylic acid, 5-isomer

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

Tetramethylrhodamine (TAMRA) is a xantheno 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 similar spectral properties. This compound is a pure 5-isomer of TAMRA.

TAMRA carboxylic acid is a non-reactive form of TAMRA dye that can be used as a reference standard in experiments involving TAMRA dye conjugates. Besides, the carboxylic group can react with hydrazines, hydroxylamines, and amines using carbodiimides such as EDAC.



Structure of TAMRA carboxylic acid, 5-isomer

General properties

Appearance:	green powder
Molecular weight:	430.46
Molecular formula:	C ₂₅ H ₂₂ N ₂ O ₅
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
CF ₂₆₀ :	0.32
CF ₂₈₀ :	0.19