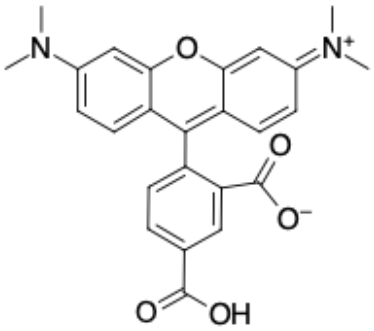
Lumiprobe Corporation
201 International Circle, Suite 135
Hunt Valley, Maryland 21030
USA
Phone: +1 888 973 6353
Fax: +1 888 973 6354
Email: order@lumiprobe.com

TAMRA carboxylic acid, 5-isomer

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

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 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:	$C_{25}H_{22}N_2O_5$
Quality control:	NMR ^1H and HPLC-MS (95+%)
Storage conditions:	24 months after receival 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, $L \cdot mol^{-1} \cdot cm^{-1}$:	84000
Emission maximum, nm:	567
Fluorescence quantum yield:	0.1
CF_{260}:	0.32
CF_{280}:	0.19