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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 CAS number: 91809-66-4 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.

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