

TAMRA maleimide, 5-isomer

http://www.lumiprobe.com/p/tamra-maleimide-5

TAMRA is a well-known rhodamine dye. It is available as two isomers, 5-, and 6-, which have almost identical properties, but need to be separated. This is a thiol-reactive maleimide derivative of 5-TAMRA.





Structure of 5-TAMRA maleimide

Absorption and emission spectra of 5-TAMRA

General properties	
Appearance:	red powder
Mass spec M+ increment:	552.2
Molecular weight:	552.58
Molecular formula:	$C_{31}H_{28}N_4O_6$
IUPAC name:	1-[2-({3',6'-Bis(dimethylamino)-3-oxospiro[isobenzofuran-1,9'-xanthen]-5-yl}carbonylamino)ethyl]-1H-pyrrole-2,5-dione
Solubility:	good in DMF, DMSO
Quality control:	NMR ¹ H, HPLC-MS (95%)
Storage conditions:	Storage: 12 months after receival 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

 $\begin{array}{ll} \mbox{Excitation/absorption} & 541 \\ \mbox{maximum, nm:} & & & \\ \mbox{ϵ, L-mol}^{-1}$\cdot cm^{-1}$: & & $84000 \\ \mbox{Emission maximum, } & $567 \\ \mbox{nm:} & & & \\ \mbox{Fluorescence} & & 0.1 \\ \mbox{quantum yield:} & & \\ \mbox{CF}_{260}$: & & 0.32 \\ \mbox{CF}_{280}$: & & 0.19 \\ \end{array}$