

## TMRE [Tetramethylrhodamine ethyl ester] \*CAS#: 115532-52-0\*

Catalog number: 22220 Unit size: 25 mg

Product Details	
Storage Conditions	Freeze (<-15 °C), Minimize light exposure
Expiration Date	12 months upon receiving
Chemical Properties	
Appearance	Red solid
Molecular Weight	514.95
Soluble In	DMSO
Chemical Structure	$ \begin{array}{c} & & & & & & \\ & & & & & & \\ & & & & & $

Spectral Properties	
Excitation Wavelength	552 nm
Emission Wavelength	574 nm

## Applications

Positively charged rhodamine dyes (such as rhodamine esters and rosamines) are selectively localized in mitochondria, thus they are widely used for labeling mitochondria of live cells. Like JC-1, TMRM and TMRE are widely used for measuring mitochondrial membrane potential besides their selective mitochondrial staining. These two particular rhodamine esters stain mitochondria orange in fluorescence. Their spectral properties are similar to those of TRITC, making the use of TMRM and TMRE quite convenient. TMRE is slightly more hydrophobic than TMRM.