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TMRE

TMRE (Tetramethylrhodamine ethyl ester, perchlorate) and TMRM (70017) are preferred dyes for quantitative measurements of membrane potentials using the Nernst equation.

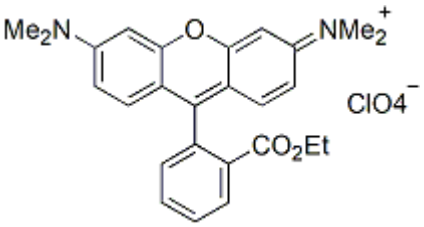
Product attributes

CAS number	115532-52-0
Probe cellular localization	Mitochondria
For live or fixed cells	For live/intact cells
Assay type/options	Real-time imaging
Cell permeability	Membrane permeant
Apoptosis/viability marker	Mitochondrial potential
Potential dependence	Mitochondrial potential-dependent
Colors	Red
Excitation/Emission	549/574 nm

Product Description

TMRE (Tetramethylrhodamine ethyl ester, perchlorate) and TMRM (70017) are preferred dyes for quantitative measurements of membrane potentials using the Nernst equation. The dyes do not form aggregates in cell membranes and have minimal interaction with membrane proteins. Thus, the transmembrane distribution of the dyes is directly related to the membrane potential according to the Nernst equation. Biotium also offers TMRE, 2 mM in DMSO (70005) as a ready to use stock solution.

- $\lambda_{Ex}/\lambda_{Em}$ (MeOH) = 549/574 nm
- Red solid soluble in DMSO, DMF or EtOH
- Store at 4 °C and protect from light
- $C_{26}H_{27}ClN_2O_7$
- MW: 515
- [115532-52-0]



References

1. Meth Cell Biol 38, 195 (1993).
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4. Biophys J 53, 785 (1988).