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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.



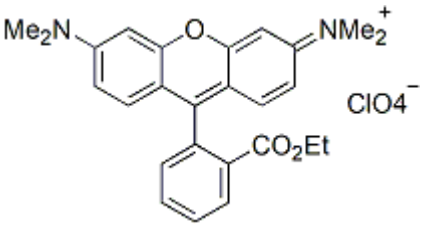
## Product attributes

| | |
|---|---|
| **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).
2. Meth Cell Biol 30, 193 (1989).
3. Biophys J 56, 1053 (1989).
4. Biophys J 53, 785 (1988).



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Product link: https://biotium-woo.supremeclients.com/product/tetramethylrhodamine-ethyl-ester-perchlorate-tmre/