

Glowing Products for Science¹

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Product Information

TMRM (Tetramethylrhodamine methyl ester, perchlorate)

Catalog Number: 70017

Unit Size: 25 mg

Storage and Handling

Store at 4°C dessicated and protected from light. Product is stable for at least 12 months from date of receipt when stored as recommended as a solid.

Stock solutions may be prepared in anhydrous DMSO (catalog no. 90082). Solutions can be aliquoted and stored with desiccant and protected from light at 4°C, for at least ten years.

Molecular Information: C₂₅H₂₅CIN₂O₇

CAS number: 115532-50-8 Molecular Weight: 501

Color and Form: Green/purple metallic solid Solubility: Soluble in DMSO and MeOH Absorption/Emission: 549/573 nm

Figure 1. TMRM (Tetramethylrhodamine methyl ester, perchlorate)

Product Description

TMRM is a widely-used dye for quantitative measurement of membrane potentials using the Nernst equation. The dye does not form aggregates in cell membranes and displays minimal interaction with membrane proteins. Thus, the transmembrane distribution of the dye is directly related to the membrane potential by the Nernst equation.

References

1) Meth 12. Cell Biol. 38, 195(1993); 2) Meth. Cell Biol. 30, 193(1989); 3) Biophys., J. 53, 785(1988).

Related Products

Catalog number	Product
90082	DMSO, Anhydrous
70016	TMRE (Tetramethylrhodamine ethyl ester, perchlorate)
70005	TMRE, 2 mM in DMSO
61011	DiBAC ₄ (3)
70008	DiOC ₂ (3)
70007	DiOC ₅ (3)
70009	DiOC ₆ (3)
61010	Di-4-ANEPPS
61012	Di-8-ANEPPS
61013	Di-2-ANEPEQ
61014	Di-2-ANEPPQ
61015	Di-12-ANEPPQ
61018	RH237
61016	RH414
61017	RH421
61019	RH795
30037	DiO/DPA Membrane Potential Kit
70070	MitoView™ 405
70054	MitoView™ Green
70055	MitoView™ 633
70075	MitoView™ 650
70068	MitoView™ 720
30001	JC-1 Mitochondrial Membrane Potential Detection Kit

Please visit our website at www.biotium.com to view our full selection of slowresponse and fast-response membrane potential dyes. We also offer rapid and specific MitoView™ dyes for potential-dependent and potential-independent staining of mitochondria. View our full catalog of environmentally friendly EvaGreen® qPCR master mixes, fluorescent CF® dye antibody conjugates and reactive dyes, apoptosis reagents, fluorescent probes, and kits for cell biology

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