

TMRM Perchlorate

Catalog No: tcsc0033442



Available Sizes

Size: 5mg

Size: 10mg



Specifications

CAS No:

115532-50-8

Formula:

$C_{25}H_{25}ClN_2O_7$

Pathway:

Others

Target:

Others

Purity / Grade:

>98%

Solubility:

DMSO : 62.5 mg/mL (124.77 mM; Need ultrasonic and warming)

Alternative Names:

T668

Observed Molecular Weight:

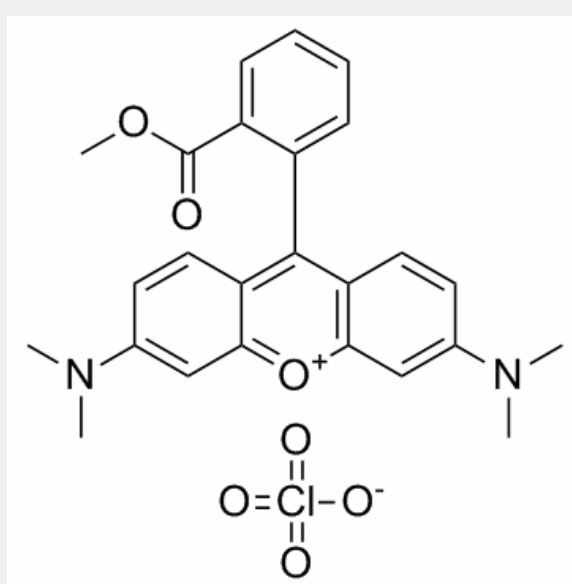
500.93

Product Description

TMRM Perchlorate is a cell-permeant cationic lipophilic red fluorescent dye (λ_{ex} =530 nm, λ_{em} =592 nm).

In Vitro:

TMRM Perchlorate is a fluorescent probe (excitation, 530 ± 21 nm; emission, 592 ± 22 nm). The fluorescence signal in the presence of TMRM Perchlorate shows a slight decrease after the addition of glutamate, indicative of increased polarization of the mitochondrial inner membrane. In the presence of TMRM Perchlorate (2 μ M) the coupled respiration with Complex I substrates or upon the addition of Complex II substrate is decreased by 27%^[1]. Exposure of hippocampal cultures to low concentrations of TMRM Perchlorate (50 to 500 nM) for 1 to 3 hours results in selective staining of mitochondria in both neurons and the underlying glial cells. Exposure of hippocampal cultures to high concentrations of TMRM Perchlorate (1 to 25 μ M) stains mitochondria selectively and quickly, reaching a plateau after 5 to 10 min. Low concentrations of TMRM Perchlorate (50 to 200 nM) do not induce apoptosis, whereas higher concentrations (0.5 and 2.5 μ M) enhance apoptosis ($K_D = 500$ nM)^[2].



All products are for RESEARCH USE ONLY. Not for diagnostic & therapeutic purposes!