

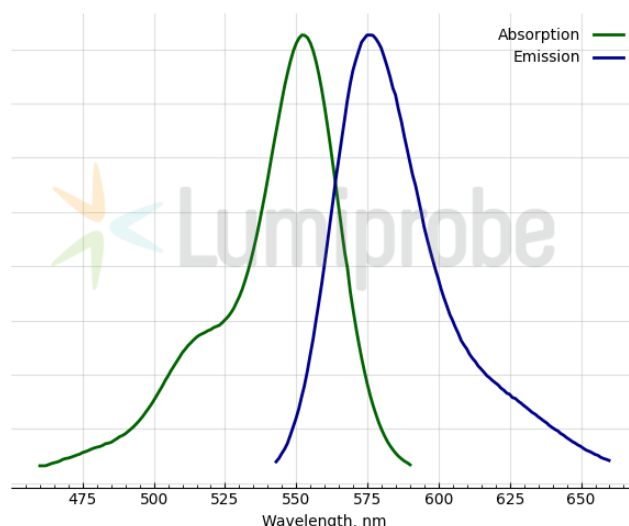
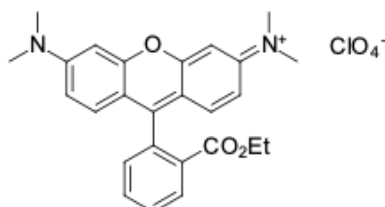
LumiTracker® Mito TMRE

<http://hk.lumiprobe.com/p/tmre-mitochondrial-dye>

TMRE is widely used for labeling mitochondria in live cells but not compatible with fixation. This lipophilic and positively charged dye rapidly permeates plasma membrane without interacting with membrane proteins and forming aggregates. TMRE selectively accumulates in active mitochondria due to their transmembrane potential.

In addition to staining mitochondria for imaging purposes, TMRE is used for quantitative measurements of mitochondria membrane potential using Nernst equation. The dye serves as a tool to study mitochondrial function changes and cell viability in response to stimuli or pharmaceuticals of interest. Mitochondrial depolarization caused by apoptosis, necrosis or other factors is characterized by decreased membrane potential and is indicated with decreased fluorescence compared to intact cells that have polarized mitochondria.

TMRE applications include fluorescent microscopy, flow cytometry, microplate assays. The dye has an excitation maximum at 549 nm: it can be effectively excited by the blue (488 nm) or yellow-green (561 nm) lasers. Emission of the dye can be detected in PE channel (maximum at 574 nm).



外观:

分子量: 514.96

CAS 编号: 115532-52-0

分子式: $C_{26}H_{27}N_2ClO_7$

IUPAC 名称: 3,6-bis(dimethylamino)-9-(2-ethoxycarbonylphenyl)xanthylium perchlorate

溶解度:

质量控制:

储存条件:

法律声明:

本產品僅供研究目的提供和銷售。本產品並未經過食品、藥品、醫療器械、化妝品等領域的安全性和效力測試，且未經明示或暗示授權用於其他任何用途，包括但不限於體外診斷、人類或動物用途，以及商業用途。

激发/吸收极大值, 纳米: 552

ϵ , 摩尔吸光系数, cm^{-1} : 156000

发射极大值, 纳米: 575

荧光量子产率: 0.66