

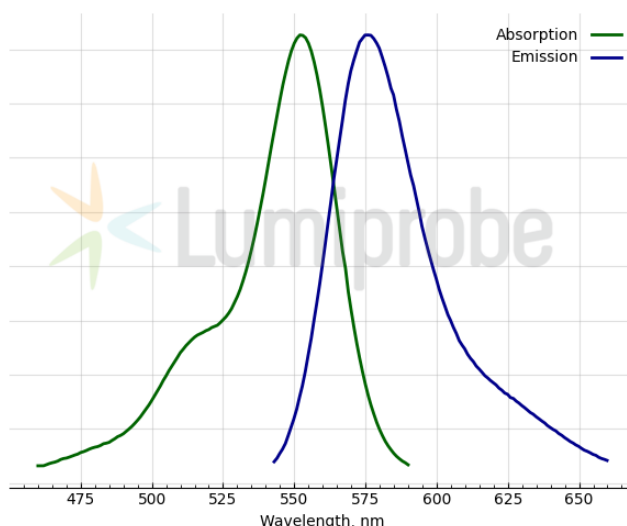
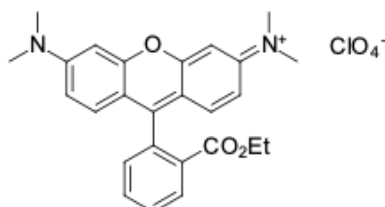
LumiTracker® Mito TMRE

<http://cn.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 514.96

量:

CAS 115532-52-0

编号:

分子 $C_{26}H_{27}N_2ClO_7$

式:

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

名称:

溶解

度:

质量

控制:

储存

条件:

法律 本产品仅供研究目的提供和销售。 本产品并未经过食品、药品、医疗器械、化妆品等领域的安全性和效力测试，且未经明示或暗示授权用于其他任何用途，包括但不限于体外诊断、人类或动物用途，以及商业用途。

激发/ 552

吸收

极大

值，

纳米:

ϵ , 摩 156000

尔吸

光系

数 cm^2

发射 575

极大

值，

纳米:

荧光量子产率: 0.66