

# **Certificate of Analysis**

Print Date: Jul 20th 2022

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Product Name: MitoMark Red I Catalog No.: 6445 Batch No.: 3

CAS Number: 167095-09-2

IUPAC Name: 9-[4-(Chloromethyl)phenyl]-2,3,6,7,12,13,16,17-octahydro-1H,5H,11H,15H-xantheno[2,3,4-ij:5,6,7-i'j']diquinolizin-18-

ium chloride

## 1. PHYSICAL AND CHEMICAL PROPERTIES

**Batch Molecular Formula:** C<sub>32</sub>H<sub>32</sub>Cl<sub>2</sub>N<sub>2</sub>O

Batch Molecular Weight: 531.52

**Physical Appearance:** 

Storage: Store at -20°C

**Batch Molecular Structure:** 

### 2. ANALYTICAL DATA

**HPLC:** Shows 99.0% purity

**UV Spectrum:** Consistent with structure

 $\lambda_{\text{max}}$ : 578 nm (MeOH)



## **Product Information**

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ium chloride

#### **Description:**

MitoMark Red I is a red fluorescent mitochondrial stain. Fluorescence intensity is dependent on mitochondrial membrane potential. Excitation/emission maxima  $\lambda \sim 578/599$  nm. It is recommended to prepare stock solutions in DMSO.

#### **Physical and Chemical Properties:**

Batch Molecular Formula: C<sub>32</sub>H<sub>32</sub>Cl<sub>2</sub>N<sub>2</sub>O Batch Molecular Weight: 531.52

Physical Appearance:

Minimum Purity: ≥90%

## **Batch Molecular Structure:**

Storage: Store at -20°C

CAUTION - This product is light sensitive and we recommend that the solid material and any solutions obtained are protected from exposure to light.

#### Stability and Solubility Advice:

Some solutions can be difficult to obtain and can be encouraged by rapid stirring, sonication or gentle warming (in a 45-60°C water bath).

Information concerning product stability, particularly in solution, has rarely been reported and in most cases we can only offer a general guide. Our standard recommendations are:

SOLIDS: Provided storage is as stated on the product label and the vial is kept tightly sealed, the product can be stored for up to 6 months from date of receipt.

SOLUTIONS: We recommend that stock solutions, once prepared, are stored aliquoted in tightly sealed vials at -20°C or below and used within 1 month. Wherever possible solutions should be made up and used on the same day.

#### References:

**Buckman** et al (2001) MitoTracker labeling in primary neuronal and astrocytic cultures: influence of mitochondrial membrane potential and oxidants. J.Neuroscience Methods. **104** 165. PMID: 11164242.

Poot et al (1996) Analysis of mitochondrial morphology and function with novel fixable fluorescent stains. J.Histochem.Cytochem. 44 1363. PMID: 8985128.