# Certificate of Analysis



**Product Name:** **Mito-HE** **Catalog No.: 7641** **Batch No.: 1**

CAS Number: 1003197-00-9

IUPAC Name: [6-(3,8-Diamino-6-phenyl-5(6*H*)-phenanthridinyl)hexyl]triphenylphosphonium iodide

## 1. PHYSICAL AND CHEMICAL PROPERTIES

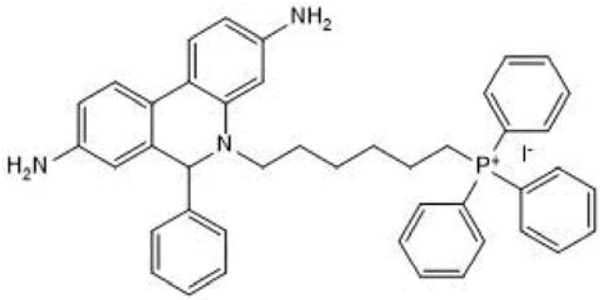
**Batch Molecular Formula:** $C_{43}H_{43}IN_3P$

**Batch Molecular Weight:** 759.72

**Physical Appearance:**

**Storage:** Store at -20°C

**Batch Molecular Structure:**




## 2. ANALYTICAL DATA

**HPLC:** Shows 89.0% purity

**UV Spectrum:** Consistent with structure

**$\lambda_{max}$:** 357 nm (ACN)



**bio-techne.com**
info@bio-techne.com
techsupport@bio-techne.com

**North America**
Tel: (800) 343 7475

**China**
info.cn@bio-techne.com
Tel: +86 (21) 52380373

**Europe Middle East Africa**
Tel: +44 (0)1235 529449

**Rest of World**
www.tocris.com/distributors
Tel:+1 612 379 2956

**Product Name:** **Mito-HE** **Catalog No.: 7641** **Batch No.: 1**

CAS Number: 1003197-00-9

IUPAC Name: [6-(3,8-Diamino-6-phenyl-5(6*H*)-phenanthridinyl)hexyl]triphenylphosphonium iodide

**Description:**

Mito-HE is a fluorescent probe for imaging superoxides in mitochondria of living cells. Selective for mitochondrial superoxides over other reactive oxygen and nitrogen species. Can be used to detect mitochondrial superoxide in Parkinson's and Alzheimer's disease in vitro models. Excitation/emission maxima λ ~ 510/580 nm. It is recommended to prepare stock solutions in DMSO.

**Physical and Chemical Properties:**

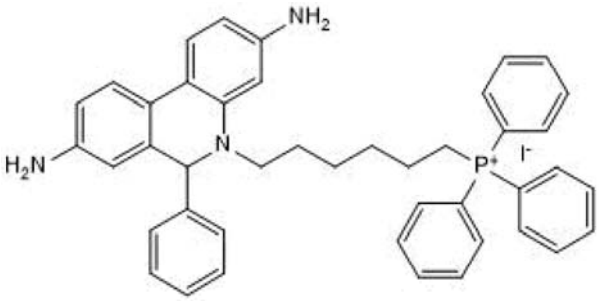
Batch Molecular Formula: $C_{43}H_{43}IN_3P$

Batch Molecular Weight: 759.72

Physical Appearance:

**Minimum Purity:** ≥80%

**Batch Molecular Structure:**




**Storage:** Store at -20°C. This product is packaged under an inert atmosphere.

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:**

**Renaudin** *et al* (2021) BRCA2 deficiency reveals that oxidative stress impairs RNaseH1 function to cripple mitochondrial DNA maintenance. Cell Rep. ***36*** 109478. PMID: 34348152.

**Chen** *et al* (2020) Trilobatin protects against Aβ $_{25-35}$-induced hippocampal HT22 cells apoptosis through mediating ROS/p38/caspase 3-dependent pathway. Front.Pharmacol. ***11*** 584. PMID: 32508629.

**Rhee** *et al* (2020) Modeling secondary iron overload cardiomyopathy with human induced pluripotent stem cell-derived cardiomyocytes. Cell Rep. ***32*** 107886. PMID: 32668256.