

MitoPQ

Chemical Properties

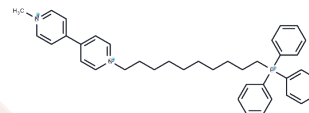
CAS No. : 1821370-28-8

Formula: C39H46I3N2P

Molecular Weight: 954.48

Storage: Keep away from moisture, Store at low temperature
Powder: -20°C for 3 years | In solvent: -80°C for 1 year

Actual storage temperature shall be subject to the COA.



Biological Description

| | |
|---------------|---|
| Description | MitoPQ (MitoParaquat) is a mitochondria-targeted small molecule compound that selectively enhances mitochondrial superoxide and hydrogen peroxide levels and inhibits insulin-stimulated glucose uptake and translocation of glucose transport protein 4 (GLUT4) to the plasma membrane in adipocytes and myotubes. MitoPQ can be used to study mitochondrial oxidative stress and regulated GLUT4 transporter. |
| Targets(IC50) | Glucokinase, ROS Kinase, transporter |

Solubility Information

| | |
|---------------------|--|
| Solubility | DMSO: 60 mg/mL (62.86 mM), Sonication is recommended. H2O: 20 mg/mL (20.95 mM), Sonication is recommended. (< 1 mg/ml refers to the product slightly soluble or insoluble) |
| In vivo Formulation | 10% DMSO+40% PEG300+5% Tween-80+45% Saline: 1.67 mg/mL (1.75 mM), Sonication is recommended. <i>Please add the solvents sequentially, clarifying the solution as much as possible before adding the next one. Dissolve by heating and/or sonication if necessary. Working solution is recommended to be prepared and used immediately. The formulation provided above is for reference purposes only. In vivo formulations may vary and should be modified based on specific experimental conditions.</i> |

Preparing Stock Solutions

| | 1mg | 5mg | 10mg |
|-------|------------|------------|-------------|
| 1 mM | 1.0477 mL | 5.2385 mL | 10.4769 mL |
| 5 mM | 0.2095 mL | 1.0477 mL | 2.0954 mL |
| 10 mM | 0.1048 mL | 0.5238 mL | 1.0477 mL |
| 50 mM | 0.021 mL | 0.1048 mL | 0.2095 mL |

Please select the appropriate solvent to prepare the stock solution, according to the solubility of the product in different solvents. Please use it as soon as possible.

Note: The dilution table applies only to solid products. For liquid products, please calculate the stock solution based on the stated concentration and/or density.

Reference

Robb EL, et al. Selective superoxide generation within mitochondria by the targeted redox cyler MitoParaquat. Free Radic Biol Med. 2015 Dec;89:883-94.

Inhibitor · Natural Compounds · Compound Libraries · Recombinant Proteins

This product is for Research Use Only · Not for Human or Veterinary or Therapeutic Use

Tel:781-999-4286 E_mail:info@targetmol.com Address:34 Washington Street,Wellesley Hills,MA 02481