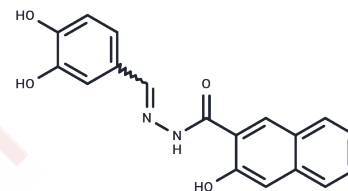


## Dynasore

## Chemical Properties

CAS No. :	304448-55-3
Formula:	C <sub>18</sub> H <sub>14</sub> N <sub>2</sub> O <sub>4</sub>
Molecular Weight:	322.31
Storage:	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	Dynasore (Dynamamin Inhibitor I), a cell-permeable chemical, can reversibly and non-competitively inhibit GTPase activity of dynamin 1/2 (IC <sub>50</sub> : 15 μM in a cell-free assay). It also inhibits the mitochondrial dynamin Drp1, with no effect against other small GTPase.
Targets(IC <sub>50</sub> )	Autophagy,HSV,Dynamamin,Virus Protease
In vivo	Dynasore significantly ameliorates motor dysfunction in rats at 3, 7, and 10 days post-SCI, potentially through the inhibition of neuronal mitochondrial apoptotic pathway activation and astrocytic proliferation [4].
Kinase Assay	RIP1 kinase assay: Phosphorylation of RIP1 requires its kinase activity. Expression constructs of FLAGtagged wild-type (WT) or a kinase-inactive point mutant of RIP1 (K45M) are transfected into 293T cells and RIP1 kinase assay is performed as described in the Methods in the presence of [ $\gamma$ - <sup>32</sup> P]ATP for 30 min at 30°C. Samples are subjected to SDS-PAGE and RIP1 band is visualized by autoradiography. Relative intensities of radioactive bands are quantified and are shown (ratio) in this and all other autoradiographs. In parallel to kinase reactions, a sample of beads is subjected to western blot analysis using anti-RIP1 antibody to ensure equal protein amounts in kinase reactions.
Cell Research	Mouse ventricular myocytes are isolated from male adult C6/Black mouse. Cardiomyocytes subjects to 2 hours of drug treatment followed by oxidative stress (30 μM Water2 for 35 min). For ATP supplement experiments, the cells are treated with 3 mM ATP for 30 min before exposure to Water2. Cardiomyocyte survival and viability are analyzed by trypan blue exclusion (TBE) assay[3].

## Solubility Information

Solubility	Ethanol: 1.6 mg/mL (4.96 mM),Sonication is recommended. DMSO: 120 mg/mL (372.31 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: 4 mg/mL (12.41 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

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	<b>1mg</b>	<b>5mg</b>	<b>10mg</b>
1 mM	3.1026 mL	15.513 mL	31.026 mL
5 mM	0.6205 mL	3.1026 mL	6.2052 mL
10 mM	0.3103 mL	1.5513 mL	3.1026 mL
50 mM	0.0621 mL	0.3103 mL	0.6205 mL

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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.

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