

CAS Number:

Certificate of Analysis

Print Date: Oct 1st 2025

Batch No.: 1

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Catalog No.: 5364

Product Name: Hydroxy Dynasore

IUPAC Name: 3-Hydroxynaphthalene-2-carboxylic acid 2-[(2,4,5)-trihydroxyphenyl)methylene]hydrazide

1. PHYSICAL AND CHEMICAL PROPERTIES

1256493-34-1

Batch Molecular Formula: $C_{18}H_{14}N_2O_5$ Batch Molecular Weight:338.31Physical Appearance:Yellow solid

Solubility: DMSO to 100 mM Storage: Store at -20°C

Batch Molecular Structure:

2. ANALYTICAL DATA

HPLC: Shows 97.7% purity

¹H NMR: Consistent with structure

Mass Spectrum: Consistent with structure

Microanalysis: Carbon Hydrogen Nitrogen

Theoretical 63.9 4.17 8.28 Found 63.83 4.13 8.23

Tel:+1 612 379 2956



Product Information

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CAS Number: 1256493-34-1

IUPAC Name: 3-Hydroxynaphthalene-2-carboxylic acid 2-[(2,4,5)-trihydroxyphenyl)methylene]hydrazide

Description:

Hydroxy Dynasore is a dynamin inhibitor (IC_{50} values are 0.38 and 2.6 μ M for dynamin 1 and 2 respectively). Inhibits dynamin-mediated endocytosis in multiple cell types and reduces synaptic vesicle endocytosis in vitro. Prevents botulinum A internalization in hippocampal neurons. Also protects against botulinum A-induced muscle paralysis in rats. Analog of Dynasore (Cat. No. 2897).

Physical and Chemical Properties:

 $\begin{aligned} & \text{Batch Molecular Formula: } C_{18}H_{14}N_2O_5\\ & \text{Batch Molecular Weight: } 338.31\\ & \text{Physical Appearance: Yellow solid} \end{aligned}$

Minimum Purity: ≥98%

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.

Solubility & Usage Info:

DMSO to 100 mM

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. *Unless contradicted by product-specific protocols or instructions, our standard recommendations apply:

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:

McCluskey et al (2013) Building a better dynasore: the dyngo compounds potently inhibit dynamin and endocytosis. Traffic **14** 1272. PMID: 24025110.

Harper et al (2011) Dynamin inhibition blocks botulinum neurotoxin type A endocytosis in neurons and delays botulism. J.Biol.Chem. **286** 35966. PMID: 21832053.