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DATASHEET

Dynasore

Product overview

Name	Dynasore
Cat No	HB1245
Biological action	Inhibitor
Purity	>99%
Description	Cell-permeable, non-competitive dynamin inhibitor

Images

Biological Data

Biological description

Overview

Cell-permeable, non-competitive dynamin inhibitor which inhibits the GTPase activity of dynamin 1, dynamin 2 and Drp1 (mitochondrial dynamin). It does not inhibit other small GTPases.

Uses and applications

Fast acting and reversible by washout.

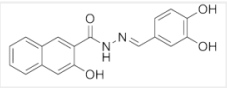
Dynasore inhibits clathrin- and dynamin-dependent endocytosis in cells including neurons.

Dynasore has additionally been shown to inhibit proliferation, induce apoptosis of lung cancer cells and to enhance the inhibitory effects of cisplatin.

Solubility & Handling

Storage instructions	-20°C
Solubility overview	Soluble in DMSO (100 mM)
Important	This product is for RESEARCH USE ONLY and is not intended for therapeutic or diagnostic use. Not for human or veterinary use.

Chemical Data

Chemical name	3-Hydroxynaphthalene-2-carboxylic acid (3,4-dihydroxybenzylidene)hydrazide
Molecular Weight	322.32
Chemical structure	
Molecular Formula	$C_{18}H_{14}N_2O_4$
CAS Number	304448-55-3
PubChem identifier	135533054
SMILES	C1=CC=C2C=C(C(=CC2=C1)C(=O)N/N=C/C3=CC(=C(C=C3)O)O)O
InChi	InChI=1S/C18H14N2O4/c21-15-6-5-11(7-17(15)23)10-19-20-18(24)14-8-12-3-1-2-4-13(12)9-16(14)22/h1-10,21-23H,(H,20,24)/b19-10+
InChiKey	SYNDQCRDGGCQRZ-VXLYETTFSA-N
MDL number	MFCD11045288
Appearance	Off-white solid

References

Dynasore, a dynamin inhibitor, suppresses lamellipodia formation and cancer cell invasion by destabilizing actin filaments.

Yamada H *et al* (2009) Biochem Biophys Res Commun 390(4)
PubMedID 19857461

Dynasore protects mitochondria and improves cardiac lusitropy in Langendorff perfused mouse heart.

Gao D *et al* (2013) PLoS One 8(4)
PubMedID 23596510

Dynasore inhibits removal of wild-type and DeltaF508 cystic fibrosis transmembrane conductance regulator (CFTR) from the plasma membrane.

Young A *et al* (2009) Biochem J 421(3)
PubMedID 19442237

Dynasore, a cell-permeable inhibitor of dynamin.

Macia E *et al* (2006) Dev Cell 10(6)
PubMedID 16740485