

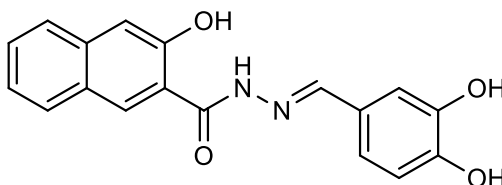
Catalog # 10-1427

Dynasore

CAS# 304448-55-3

3-Hydroxynaphthalene-2-carboxylic acid (3,4-dihydroxybenzylidene)hydrazide

Lot # X105012



Dynasore is a noncompetitive inhibitor of dynamin GTPase activity and blocks dynamin-dependent endocytosis in cells, including neurons. It inhibits the GTPase activity of dynamin1, dynamin2, and Drp1 (mitochondrial dynamin). It is cell permeable, fast acting (seconds) and reversible.^{1,2} An extremely useful tool for studying endocytosis and other cellular events which are dependent on dynamin.³⁻⁵

- 1) Macia *et al.* (2006), *Dynasore, a cell-permeable inhibitor of dynamin*; *Dev. Cell*, **10** 839
- 2) Kirschhausen *et al.* (2008), *Use of dynasore, the small molecule inhibitor of dynamin, in the regulation of endocytosis*; *Methods Enzymol.*, **438** 77
- 3) Lu *et al.* (2009), *Dynamin and activity regulate synaptic vesicle recycling in sympathetic neurons*; *J. Biol. Chem.*, **284** 1930
- 4) Chung *et al.* (2010), *Acute dynamin inhibition dissects synaptic vesicle recycling pathways that drive spontaneous and evoked neurotransmission*; *J. Neurosci.*, **30** 1363
- 5) Poirer *et al.* (2009), *Dissection of the endogenous cellular pathways of PCSK9-induced low density lipoprotein receptor degradation: evidence for an intracellular route*; *J. Biol. Chem.*, **284** 28856

PHYSICAL DATA

Molecular Weight:	322.32
Molecular Formula:	C ₁₈ H ₁₄ N ₂ O ₄
Purity:	98% by TLC
	NMR: (Conforms)
Solubility:	DMSO (up to 30 mg/ml) or Ethanol (up to 1 mg/ml)
Physical Description:	Beige solid
Storage and Stability:	Store as supplied desiccated at -20°C for up to 2 years from the date of purchase. Solutions in DMSO or ethanol may be stored at -20°C for up to 1 month.

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