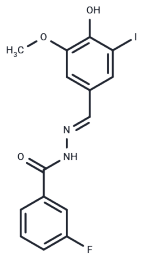
Data Sheet (Cat.No.T37020)

TargetMol

Endosidin-2

Chemical Properties



CAS No. : 1839524-44-5

Formula: C15H12FIN2O3

Molecular Weight: 414.17

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	Endosidin-2 is an exocyst inhibitor, a cell-permeable benzylidene benzoylhydrazine, that binds to the exocyst component of the 70 kDa (EXO70) subunit of the exocyst complex (Kd = 253 μM, EXO70A1).Endosidin-2 disrupts protein translocation between the endosomes and plasma membrane, thereby facilitating translocation of proteins to the vesicle for degradation. It also inhibits recirculation of endocytosed transferrin to the plasma membrane in HeLa cells and targets multiple isoforms of mammalian EXO70, leading to dysregulation of exocytosis.Endosidin2 can be used as a tool molecule to study cytosolization.
Targets(IC50)	Others
In vitro	Endosidin2 (ES2) was utilized in studying polarized cell growth in the moss Physcomitrium patens , in which plants were exposed to increasing concentrations of ES2 with an IC50 between 8.8 and 12.3 μM. At 50 μM, tip-growing cells ruptured close to their tips, an indication that ES2 inhibits the deposition of new cell wall material via exocytosis.[2]

Solubility Information

Solubility	DMSO: 125 mg/mL (301.81 mM),Sonication is recommended. DMF: 30 mg/mL (72.43 mM),Sonication is recommended. Ethanol: 0.25 mg/mL (0.6 mM),Sonication is recommended. (< 1 mg/ml refers to the product slightly soluble or insoluble)

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	2.4145 mL	12.0723 mL	24.1447 mL
5 mM	0.4829 mL	2.4145 mL	4.8289 mL
10 mM	0.2414 mL	1.2072 mL	2.4145 mL
50 mM	0.0483 mL	0.2414 mL	0.4829 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

Zhang C, et al. Endosidin2 targets conserved exocyst complex subunit EXO70 to inhibit exocytosis. Proc Natl Acad Sci U S A. 2016;113(1):E41-E50.
Bormann E, et al. Inhibition of the Exocyst Complex with Endosidin 2 Reduces Polarized Growth in Physcomitrium patens. MicroPubl Biol. 2022;2022:10.17912/micropub.biology.000655.