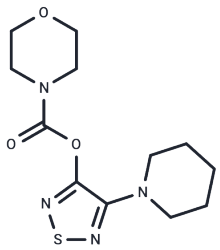
Data Sheet (Cat.No.T38344)

TargetMol

Lalistat 1

Chemical Properties



CAS No. : 501104-16-1

Formula: C12H18N4O3S

Molecular Weight: 298.36

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	Lalistat 1 is an inhibitor of lysosomal acid lipase (LAL, IC50 = 68 nM) and IgA1 protease for H. influenzae. Lalistat 1 can be used in studies about niemann-pick type C diseases.
Targets(IC50)	Antibacterial
In vitro	Lalistat 1 (0-100 μM) inhibits IgA1P B1 and B2 dose-dependently, achieving near-complete inhibition at 50 μM and complete inhibition at 100 μM [1]. Additionally, Lalistat 1 reduces cholesterol accumulation in lysosome-like reservoirs of GM03123 human fibroblasts lacking NPC1 [2].

Solubility Information

Solubility	Ethanol: 20 mg/mL (67.03 mM),Sonication is recommended. DMSO: 45 mg/mL (150.82 mM),Sonication is recommended. DMF: 20 mg/mL (67.03 mM),Sonication is recommended. (< 1 mg/ml refers to the product slightly soluble or insoluble)

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	3.3517 mL	16.7583 mL	33.5166 mL
5 mM	0.6703 mL	3.3517 mL	6.7033 mL
10 mM	0.3352 mL	1.6758 mL	3.3517 mL
50 mM	0.067 mL	0.3352 mL	0.6703 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

Rosenbaum, A.I., Rujoi, M., Huang, A.Y., et al. Chemical screen to reduce sterol accumulation in Niemann-Pick C disease cells identifies novel lysosomal acid lipase inhibitors. Biochim Biophys. Acta. 1791(12), 1155-1165 (2009).
Rosenbaum, A.I., Cosner, C.C., Mariani, C.J., et al. Thiadiazole carbamates: Potent inhibitors of lysosomal acid lipase and potential Niemann-Pick type C disease therapeutics. J. Med. Chem. 53(14), 5281-5289 (2010).
Livia Shehaj, et al. Small-Molecule Inhibitors of Haemophilus influenzae IgA1 Protease.ACS Infect Dis. 2019 Jul 12;5 (7):1129-1138.