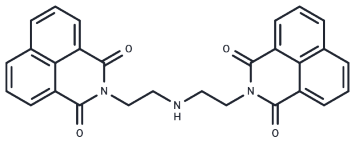
Data Sheet (Cat.No.T8921)

TargetMol
YOUR TARGET MOLECULES

M-31850

Chemical Properties



CAS No. : 281224-40-6

Formula: C28H21N3O4

Molecular Weight: 463.48

Appearance: no data available

Storage: Powder: -20°C for 3 years | In solvent: -80°C for 1 year

Biological Description

Description	M-31850 (1H-Benz[de]isoquinoline-1,3(2H)-dione, 2,2'-(iminodi-2,1-ethanediyl)bis-) is a potent, selective and competitive β-hexosaminidase (Hex) inhibitor(human HexA and human HexB with IC50s of 6.0 μM and 3.1 μM, respectively). IT also competitively inhibits β-N-acetyl-D-hexosaminidase OfHex2 with a Ki of 2.5 μM.
Targets(IC50)	Others
In vitro	M-31850 increases the half-life of the mutant Hex A from Adult forms of Tay-Sachs (ATSD) cells more than two-fold at 44° C, relative to the enzyme heated in the presence of DMSO. M-31850 acts as a classic competitive inhibitor of Hex (Km increases and Vmax is unaffected by increasing amounts of M-31850), with a Ki of 0.8 μM.M-31850 shows some activity towards Jack Bean Hex (JBHex) and bacterial Hex from Streptomyces plicatus (SpHex) (IC50 of 280 M and >500 M for JBHex and SpHex, respectively)[1]

Solubility Information

Solubility	DMSO: 5 mg/mL (10.79 mM),when pH is adjusted to 6 with HCl. Sonication is recommended. (< 1 mg/ml refers to the product slightly soluble or insoluble)

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	2.1576 mL	10.788 mL	21.5759 mL
5 mM	0.4315 mL	2.1576 mL	4.3152 mL
10 mM	0.2158 mL	1.0788 mL	2.1576 mL
50 mM	0.0432 mL	0.2158 mL	0.4315 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.

Reference

Michael B Tropak, et al. High-throughput screening for human lysosomal beta-N-Acetyl hexosaminidase inhibitors acting as pharmacological chaperones. Chem Biol. 2007 Feb;14(2):153-64.

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