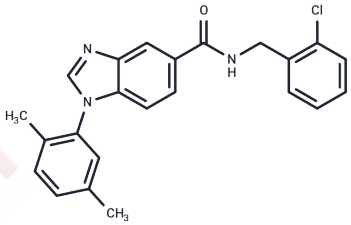
Data Sheet (Cat.No.T23709)

TargetMol

alphaSYN-IN-NAB2

Chemical Properties



CAS No. : 1504588-00-4

Formula: C23H20ClN3O

Molecular Weight: 389.88

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	alphaSYN-IN-NAB2, a neuron-protective agent, is a protein encoded by the NAB2 gene. NAB2 effectively and selectively protects a variety of cells from alpha-SYN toxicity. NAB2 promotes endosomal transport dependent on E3 ubiquitin ligase Rsp5/Nedd4. NAB2 identifies a viable molecular node in alpha-SYN biology that corrects multiple aspects of its underlying pathology, including dysfunctional endosomes and endoplasmic reticulum to Golgi vesicles transport. NAB2 is involved in cellular processes such as cell differentiation, apoptosis and stress response, and can be used to study cancer, neurodevelopment and neuronal activity.
Targets(IC50)	Others,NEDD4-1

Solubility Information

Solubility	DMSO: 50 mg/mL (128.24 mM),Sonication is recommended. Ethanol: 35.1 mg/mL (90.03 mM),Sonication is recommended. (< 1 mg/ml refers to the product slightly soluble or insoluble)
In vivo Formulation	10% DMSO+40% PEG300+5% Tween 80+45% Saline: 2 mg/mL (5.13 mM),Sonication is recommended. *Please add the solvents sequentially, clarifying the solution as much as possible before adding the next one. Dissolve by heating and/or sonication if necessary. Working solution is recommended to be prepared and used immediately. The formulation provided above is for reference purposes only. In vivo formulations may vary and should be modified based on specific experimental conditions.*

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	2.5649 mL	12.8245 mL	25.6489 mL
5 mM	0.513 mL	2.5649 mL	5.1298 mL
10 mM	0.2565 mL	1.2824 mL	2.5649 mL
50 mM	0.0513 mL	0.2565 mL	0.513 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

Wang L, et al. Seipin deficiency in mice causes loss of dopaminergic neurons via aggregation and phosphorylation of α-synuclein and neuroinflammation. Cell Death Dis. 2018;9(5):440.
Shvadchak VV, et al. Inhibition of α-Synuclein Amyloid Fibril Elongation by Blocking Fibril Ends. Angew Chem Int Ed Engl. 2018;57(20):5690-5694.
Sturm E, Fellner L, Krismer F, Poewe W, Wenning GK, Stefanova N. Neuroprotection by Epigenetic Modulation in a Transgenic Model of Multiple System Atrophy. Neurotherapeutics. 2016 Oct;13(4):871-879. doi: 10.1007/s13311-016-0447-1. PubMed PMID: 27259295; PubMed Central PMCID: PMC5081120.
Delenclos M, Trendafilova T, Jones DR, Moussaud S, Baine AM, Yue M, Hirst WD, McLean PJ. A Rapid, Semi-Quantitative Assay to Screen for Modulators of Alpha-Synuclein Oligomerization Ex vivo. Front Neurosci. 2016 Jan 19;9:511. doi: 10.3389/fnins.2015.00511. eCollection 2015. PubMed PMID: 26834539; PubMed Central PMCID: PMC4717311.