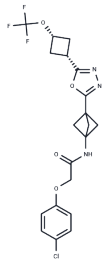
Data Sheet (Cat.No.T78876)

DNL343

Chemical Properties



CAS No. : 2278265-85-1

Formula: C20H19ClF3N3O4

Molecular Weight: 457.83

Storage: Pure form: -20°C for 3 years | In solvent: -80°C for 1 year
Actual storage temperature shall be subject to the COA.

Biological Description

Description	DNL343 is a selective and potent eIF2B activator that crosses the blood-brain barrier and inhibits the assembly of stress granules (SGs) induced by the C9ORF72 dipeptide repeats. DNL343 may be useful in the study of neurodegenerative diseases, such as amyotrophic lateral sclerosis (ALS).
Targets(IC50)	PERK

Solubility Information

Solubility	DMSO: 80 mg/mL (174.74 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: 3.3 mg/mL (7.21 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	2.1842 mL	10.9211 mL	21.8422 mL
5 mM	0.4368 mL	2.1842 mL	4.3684 mL
10 mM	0.2184 mL	1.0921 mL	2.1842 mL
50 mM	0.0437 mL	0.2184 mL	0.4368 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

Yulyaningsih E, et al. DNL343 is an investigational CNS penetrant eIF2B activator that prevents and reverses the effects of neurodegeneration caused by the Integrated Stress Response[J]. bioRxiv, 2023: 2023.8.21.554203.