Product Datasheet

Technical Data

Formula	$C_{23}H_{23}FN_4S$					
Molecular Weight	406.52	**CAS No.**	1304630-27-0			
Solubility (25°C)*	In vitro	DMSO	40 mg/mL (98.39 mM)			
		Ethanol	3 mg/mL (7.37 mM)			
		Water	Insoluble			
	In vivo (Add solvents to the product individually and in order)	Oral Administration	Homogeneous suspension	CMC-NA	≥5mg/ml	Taking the 1 mL working solution as an example, add 5 mg of this product to 1 ml of CMC-Na solution, mix evenly to obtain a homogeneous suspension with a final concentration of 5 mg/ml.

* <1 mg/ml means slightly soluble or insoluble.
* Please note that Capsid Bio tests the solubility of all compounds in-house, and the actual solubility may differ slightly from published values. This is normal and is due to slight batch-to-batch variations.
* Room temperature shipping (Stability testing shows this product can be shipped at 2-8°C for storage purposes.)

Preparing Stock Solutions

Concentration \ Volume / Mass	1 mg	5 mg	10 mg
1 mM	2.4599 mL	12.2995 mL	24.5990 mL
5 mM	0.4920 mL	2.4599 mL	4.9198 mL
10 mM	0.2460 mL	1.2300 mL	2.4599 mL
50 mM	0.0492 mL	0.2460 mL	0.4920 mL

Biological Activity

Description	NGP 555 is a small-molecule modulator of **γ-secretase** and has been successful in achieving good oral absorption, brain penetration, CNS activity, and specificity for a lipid-based membrane target preclinically.
Targets	γ secretase [1] (Cell-free assay)
In vivo	NGP 555 has very good brain penetration/absorption, distribution, metabolism, and excretion (ADME) properties. It efficiently crosses the blood-brain barrier, has a brain:plasma ratio of 0.93 (in Tg2576 mice) and shows in vivo efficacy for lowering the biomarker Aβ42 in rodent studies for brain and plasma. Chronic administration of this compound (milled into chow) to Tg2576 mice results in a significant reduction of amyloid plaques[1].

Protocol (from reference)

Cell Assay:[1]

- **Cell lines**
  SH-SY5Y-APP cells
- **Concentrations**
  10 nM-100 μM
- **Incubation Time**
  18 h
- **Method**
  SH-SY5Y-APP cells are treated with various concentrations of NGP 555 or this compound, in triplicate wells, for 18 hours. Media is collected and analyzed for Aβ peptides using Meso Scale triplex ELISA (Aβ38, Aβ40, and Aβ42) and total Aβ ELISA.

Animal Study:[1]

- **Animal Models**
  Sprague-Dawley male rats
- **Dosages**
  0-37.5 mg/kg
- **Administration**
  oral administration

References

https://pubmed.ncbi.nlm.nih.gov/28497107/

RETURN POLICY

Capsid Bio's Unconditional Return Policy ensures a smooth online shopping experience for our customers. If you are in any way unsatisfied with your purchase, you may return any item(s) within 7 days of receiving it. In the event of product quality issues, either protocol related or product related problems, you may return any item(s) within 365 days from the original purchase date. Please follow the instructions below when returning products.

SHIPPING & STORAGE

Capsid Bio products are transported at room temperature. If you receive the product at room temperature, please rest assured, the Capsid Bio Quality Inspection Department has conducted experiments to verify that the normal temperature placement of one month will not affect the biological activity of powder products. After collecting, please store the product according to the requirements described in the datasheet. Most Capsid Bio products are stable under the recommended conditions.

NOT FOR HUMAN, VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

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