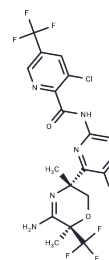


## Umibecestat

## Chemical Properties

CAS No. :	1387560-01-1
Formula:	C <sub>19</sub> H <sub>15</sub> ClF <sub>7</sub> N <sub>5</sub> O <sub>2</sub>
Molecular Weight:	513.8
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	Umibecestat is an inhibitor of beta-site amyloid precursor protein cleaving enzyme-1 (BACE-1), with IC <sub>50</sub> s of 11 nM and 10 nM for human BACE-1 and mouse BACE-1, respectively. Umibecestat can be used for the research of alzheimer's disease.
Targets(IC <sub>50</sub> )	Beta-Secretase,BACE
In vitro	Umibecestat is a potent inhibitor of BACE-1 that is selective for BACE-1 over other human pepsin-like aspartic proteases, including BACE-2 and cathepsin D[1].
In vivo	In both rat brain and CSF, Umibecestat (CNP520) (1.5-51.3 mg/kg; given by oral gavage; 72 hours) shows dose-dependent effects on Aβ <sub>40</sub> and a long duration of action. Umibecestat (3.1 mg/kg; p.o.; 7 days) shows a > 75% reduction on Aβ <sub>40</sub> and Aβ <sub>42</sub> in CSF after dosing and returns slowly to baseline over the next 7 days[1].

## Solubility Information

Solubility	DMSO: 95 mg/mL (184.9 mM),Sonication is recommended. (< 1 mg/ml refers to the product slightly soluble or insoluble)
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## Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	1.9463 mL	9.7314 mL	19.4628 mL
5 mM	0.3893 mL	1.9463 mL	3.8926 mL
10 mM	0.1946 mL	0.9731 mL	1.9463 mL
50 mM	0.0389 mL	0.1946 mL	0.3893 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

Neumann U, et al. The BACE-1 inhibitor CNP520 for prevention trials in Alzheimer's disease. EMBO Mol Med. 2018 Nov;10(11). pii: e9316.

**Inhibitor · Natural Compounds · Compound Libraries · Recombinant Proteins**

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