## Data Sheet (Cat.No.T13253)



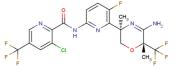
#### Umibecestat

## **Chemical Properties**

CAS No.: 1387560-01-1 Formula: C19H15CIF7N5O2

Molecular Weight: 513.8
Appearance: N/A

Storage: 0-4°C for short term (days to weeks), or -20°C for long term (months).



# **Biological Description**

Description	Umibecestat is an inhibitor of beta-site amyloid precursor protein cleaving enzyme-1 (BACE-1) (IC50s: 11 nM and 10 nM for human BACE-1 and mouse BACE-1).	
Targets(IC <sub>50</sub> )	human BACE-1: 11 nM mouse BACE-1: 10 nM	
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.	
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 A $\beta$ 40 and a long duration of action. Umibecestat (3.1 mg/kg; p.o.; 7 days) shows a > 75% reduction on A $\beta$ 40 and A $\beta$ 42 in CSF after dosing and returns slowly to baseline over the next 7 days.	

# **Solubility Information**

Solubility	< 1 mg/ml refers to the product slightly soluble or insoluble
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### **Preparing Stock Solutions**

	1mg	5mg	10mg
1 mM	1.946 mL	9.731 mL	19.463 mL
5 mM	0.389 mL	1.946 mL	3.893 mL
10 mM	0.195 mL	0.973 mL	1.946 mL
50 mM	0.039 mL	0.195 mL	0.389 mL

Please select the appropriate solvent to prepare the stock solution, according to the solubility of the product in different solvents. The storage conditions and period of the stock solution: - 80 °C for 6 months; - 20 °C for 1 month. Please use it as soon as possible.

#### Reference

1. 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.

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