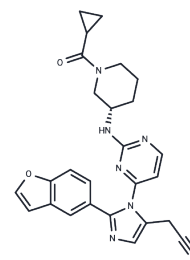


## JNK3 inhibitor-3

## Chemical Properties

CAS No. :	2873465-25-7
Formula:	C <sub>26</sub> H <sub>25</sub> N <sub>7</sub> O <sub>2</sub>
Molecular Weight:	467.52
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	JNK3 Inhibitor-3 (compound 15g) is a selective, blood-brain barrier permeable, and orally active inhibitor of c-Jun N-terminal kinase 3 (JNK3) with IC <sub>50</sub> values of 147.8 nM, 44.0 nM, and 4.1 nM against JNK1, JNK2, and JNK3, respectively. This compound has been shown to significantly enhance memory in mouse models of dementia and is utilized in Alzheimer's disease research [1].
Targets(IC <sub>50</sub> )	JNK
In vitro	JNK3 inhibitor-3, at concentrations ranging from 0 to 10 μM, exhibits inhibitory effects on JNK1, JNK2, and JNK3, with respective IC <sub>50</sub> s of 147.8, 44.0, and 4.1 nM. Additionally, at a 20 μM concentration and exposure times of 24 and 48 hours, the compound displays neuroprotective properties in vitro [1].
In vivo	JNK3 inhibitor-3, administered orally at doses of 30 and 60 mg/kg daily for 2 to 2.2 months, enhances memory in the 3XTg mouse model of dementia [1]. Regarding its pharmacokinetic properties in rats, after intravenous (IV) administration of 1 mg/kg, the area under the curve (AUC) is 1085.24 hr·ng/mL, and after oral (PO) administration of 3 mg/kg, the AUC is 2806.77 hr·ng/mL. The maximum concentration (C <sub>max</sub> ) following IV administration is 1238.85 ng/mL, occurring at a peak time (T <sub>max</sub> ) of 0.67 hours. The half-life (T <sub>1/2</sub> ) is 0.36 hours IV and 1.14 hours PO, with a bioavailability (BA) of 86.21% [1].

### Preparing Stock Solutions

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	<b>1mg</b>	<b>5mg</b>	<b>10mg</b>
1 mM	2.1389 mL	10.6947 mL	21.3895 mL
5 mM	0.4278 mL	2.1389 mL	4.2779 mL
10 mM	0.2139 mL	1.0695 mL	2.1389 mL
50 mM	0.0428 mL	0.2139 mL	0.4278 mL

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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.

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

This product is for Research Use Only · Not for Human or Veterinary or Therapeutic Use

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