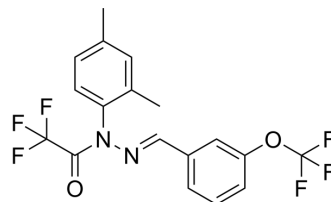


## CAD031

<b>Cat. No.:</b>	HY-124609		
<b>CAS No.:</b>	2071209-49-7		
<b>Molecular Formula:</b>	C <sub>18</sub> H <sub>14</sub> F <sub>6</sub> N <sub>2</sub> O <sub>2</sub>		
<b>Molecular Weight:</b>	404.31		
<b>Target:</b>	Monoamine Oxidase; Dopamine Transporter		
<b>Pathway:</b>	Neuronal Signaling		
<b>Storage:</b>	Powder	-20°C	3 years
		4°C	2 years
	In solvent	-80°C	6 months
		-20°C	1 month



## SOLVENT & SOLUBILITY

### In Vitro

DMSO : 100 mg/mL (247.33 mM; Need ultrasonic and warming)

Concentration	Mass		
	1 mg	5 mg	10 mg
1 mM	2.4733 mL	12.3667 mL	24.7335 mL
5 mM	0.4947 mL	2.4733 mL	4.9467 mL
10 mM	0.2473 mL	1.2367 mL	2.4733 mL

Please refer to the solubility information to select the appropriate solvent.

### In Vivo

- Add each solvent one by one: 10% DMSO >> 40% PEG300 >> 5% Tween-80 >> 45% saline  
Solubility: 2.5 mg/mL (6.18 mM); Clear solution; Need ultrasonic
- Add each solvent one by one: 10% DMSO >> 90% corn oil  
Solubility: 2.5 mg/mL (6.18 mM); Clear solution; Need ultrasonic

## BIOLOGICAL ACTIVITY

### Description

CAD031 is a derivative of the Alzheimer's disease (AD) targeting agent J147 (HY-13779) with neuroprotective and memory-enhancing properties. CAD031 enhances memory in mice, improves dendritic structure, and stimulates cell division in the germinal zone of the brain in aged mice. CAD031 is more active than J147 in human neural stem cell assays<sup>[1]</sup>.

## REFERENCES

- [1]. Prior M, et al. Selecting for neurogenic potential as an alternative for Alzheimer's disease drug discovery. *Alzheimers Dement*. 2016 Jun;12(6):678-86.

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**Caution: Product has not been fully validated for medical applications. For research use only.**

Tel: 609-228-6898

Fax: 609-228-5909

E-mail: [tech@MedChemExpress.com](mailto:tech@MedChemExpress.com)

Address: 1 Deer Park Dr, Suite Q, Monmouth Junction, NJ 08852, USA