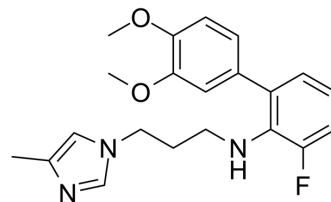


## Glutaminyl Cyclase Inhibitor 1

<b>Cat. No.:</b>	HY-112269		
<b>CAS No.:</b>	2110449-60-8		
<b>Molecular Formula:</b>	C <sub>21</sub> H <sub>24</sub> FN <sub>3</sub> O <sub>2</sub>		
<b>Molecular Weight:</b>	369.43		
<b>Target:</b>	Amyloid-β		
<b>Pathway:</b>	Neuronal Signaling		
<b>Storage:</b>	Powder	-20°C	3 years
		4°C	2 years
	In solvent	-80°C	2 years
		-20°C	1 year



### SOLVENT & SOLUBILITY

#### In Vitro

Ethanol : 100 mg/mL (270.69 mM; Need ultrasonic)  
 DMSO : 83.33 mg/mL (225.56 mM; Need ultrasonic)

Preparing Stock Solutions	Solvent Concentration	Mass		
		1 mg	5 mg	10 mg
	1 mM	2.7069 mL	13.5344 mL	27.0687 mL
	5 mM	0.5414 mL	2.7069 mL	5.4137 mL
	10 mM	0.2707 mL	1.3534 mL	2.7069 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: ≥ 2.08 mg/mL (5.63 mM); Clear solution
- Add each solvent one by one: 10% DMSO >> 90% (20% SBE-β-CD in saline)  
 Solubility: ≥ 2.08 mg/mL (5.63 mM); Clear solution
- Add each solvent one by one: 10% DMSO >> 90% corn oil  
 Solubility: ≥ 2.08 mg/mL (5.63 mM); Clear solution

### BIOLOGICAL ACTIVITY

#### Description

Glutaminyl Cyclase Inhibitor 1 is a glutaminyl cyclase inhibitor with an IC<sub>50</sub> of 0.5 μM.

#### IC<sub>50</sub> & Target

IC<sub>50</sub>: 0.5 μM (Glutaminyl cyclase)<sup>[1]</sup>

#### In Vitro

Glutaminyl Cyclase Inhibitor 1 is compound 23<sup>[1]</sup>.  
 MCE has not independently confirmed the accuracy of these methods. They are for reference only.

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## REFERENCES

[1]. Li M, et al. Synthesis and Evaluation of Diphenyl Conjugated Imidazole Derivatives as Potential Glutaminyl Cyclase Inhibitors for Treatment of Alzheimer's Disease. J Med Chem. 2017 Aug 10;60(15):6664-6677.

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

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