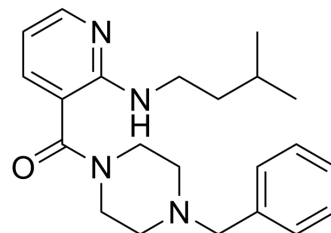


## NSI-189

<b>Cat. No.:</b>	HY-13999		
<b>CAS No.:</b>	1270138-40-3		
<b>Molecular Formula:</b>	C <sub>22</sub> H <sub>30</sub> N <sub>4</sub> O		
<b>Molecular Weight:</b>	366.5		
<b>Target:</b>	Others; Others		
<b>Pathway:</b>	Others		
<b>Storage:</b>	Powder	-20°C	3 years
		4°C	2 years
	In solvent	-80°C	6 months
		-20°C	1 month



### SOLVENT & SOLUBILITY

<b>In Vitro</b>	DMSO : 110 mg/mL (300.14 mM; Need ultrasonic)					
		Solvent Concentration	Mass	1 mg	5 mg	10 mg
	<b>Preparing Stock Solutions</b>	1 mM		2.7285 mL	13.6426 mL	27.2851 mL
		5 mM		0.5457 mL	2.7285 mL	5.4570 mL
10 mM			0.2729 mL	1.3643 mL	2.7285 mL	
Please refer to the solubility information to select the appropriate solvent.						
<b>In Vivo</b>	<ol style="list-style-type: none"> <li>Add each solvent one by one: 10% DMSO &gt;&gt; 40% PEG300 &gt;&gt; 5% Tween-80 &gt;&gt; 45% saline Solubility: 2.75 mg/mL (7.50 mM); Suspended solution; Need ultrasonic</li> <li>Add each solvent one by one: 10% DMSO &gt;&gt; 90% (20% SBE-β-CD in saline) Solubility: ≥ 2.75 mg/mL (7.50 mM); Clear solution</li> <li>Add each solvent one by one: 10% DMSO &gt;&gt; 90% corn oil Solubility: ≥ 2.75 mg/mL (7.50 mM); Clear solution</li> </ol>					

### BIOLOGICAL ACTIVITY

<b>Description</b>	NSI-189, benzylpiperazine-aminopyridine, is a multi-domain neurogenic compound with brain-therapeutic properties. NSI-189 can stimulate neurogenesis of human hippocampus-derived neural stem cells in vitro and stimulates neurogenesis in murine hippocampus in vivo. NSI-189 can be used for the research of psychiatric disorders <sup>[1]</sup> .
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### REFERENCES

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[1]. McIntyre RS, et al. The neurogenic compound, NSI-189 phosphate: a novel multi-domain treatment capable of pro-cognitive and antidepressant effects. *Expert Opin Investig Drugs*. 2017 Jun;26(6):767-770.

[2]. <http://gizmodo.com/5874433/the-pill-that-could-cure-depression-by-growing-your-brain>

[3]. Compositions to effect neuronal growth US 8030492 B2

[4]. Why Neuralstem Could Provide A 10x Return

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

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