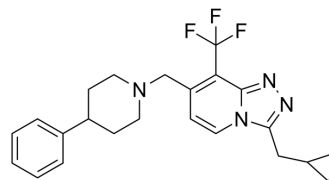


## JNJ-46281222

<b>Cat. No.:</b>	HY-120530		
<b>CAS No.:</b>	1254980-38-5		
<b>Molecular Formula:</b>	C <sub>23</sub> H <sub>25</sub> F <sub>3</sub> N <sub>4</sub>		
<b>Molecular Weight:</b>	414.47		
<b>Target:</b>	mGluR		
<b>Pathway:</b>	GPCR/G Protein; 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

<b>In Vitro</b>	DMSO : 62.5 mg/mL (150.79 mM; Need ultrasonic)				
		Solvent Concentration	Mass 1 mg	5 mg	10 mg
	<b>Preparing Stock Solutions</b>	1 mM	2.4127 mL	12.0636 mL	24.1272 mL
		5 mM	0.4825 mL	2.4127 mL	4.8254 mL
10 mM		0.2413 mL	1.2064 mL	2.4127 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; 90% (20% SBE-β-CD in saline) Solubility: ≥ 2.08 mg/mL (5.02 mM); Clear solution</li> <li>Add each solvent one by one: 10% DMSO &gt;&gt; 90% corn oil Solubility: ≥ 2.08 mg/mL (5.02 mM); Clear solution</li> </ol>				

### BIOLOGICAL ACTIVITY

<b>Description</b>	JNJ-46281222 is a metabotropic glutamate (mGlu) 2-selective, highly potent PAM (positive allosteric modulator) with nanomolar affinity ( $K_D = 1.7$ nM) and a high modulatory potency ( $pEC_{50} = 7.71$ ) <sup>[1]</sup> .
<b>IC<sub>50</sub> &amp; Target</b>	mGluR2 1.7 nM (K <sub>d</sub> )
<b>In Vitro</b>	JNJ-46281222 binds to the selected mGlu2 receptor mutants is significantly decreased by approximately 10-fold compared with WT, in transfected mGlu2 WT and mutant receptors in CHO-K1 cells, mutations F643A and N735D are selected <sup>[1]</sup> . MCE has not independently confirmed the accuracy of these methods. They are for reference only. Western Blot Analysis <sup>[1]</sup>

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Cell Line:	CHO $\alpha$ K1 cells
Concentration:	
Incubation Time:	
Result:	Showed a decreased expression of mGlu2 receptor in mutant cells.

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## REFERENCES

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[1]. Doornbos ML, et al. Molecular mechanism of positive allosteric modulation of the metabotropic glutamate receptor 2 by JNJ-46281222. Br J Pharmacol. 2016 Feb;173(3):588-600.

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

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