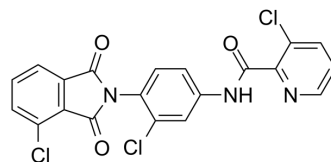


## VU0483605

Cat. No.:	HY-100605
CAS No.:	1623101-11-0
Molecular Formula:	C <sub>20</sub> H <sub>10</sub> Cl <sub>3</sub> N <sub>3</sub> O <sub>3</sub>
Molecular Weight:	446.67
Target:	mGluR
Pathway:	GPCR/G Protein; Neuronal Signaling
Storage:	4°C, protect from light * In solvent : -80°C, 6 months; -20°C, 1 month (protect from light)



### SOLVENT & SOLUBILITY

In Vitro	DMSO : 100 mg/mL (223.88 mM; Need ultrasonic)				
		Solvent Concentration	Mass		
	Preparing Stock Solutions		1 mg	5 mg	10 mg
		1 mM	2.2388 mL	11.1939 mL	22.3879 mL
		5 mM	0.4478 mL	2.2388 mL	4.4776 mL
	10 mM	0.2239 mL	1.1194 mL	2.2388 mL	
Please refer to the solubility information to select the appropriate solvent.					
In Vivo	1. Add each solvent one by one: 10% DMSO >> 40% PEG300 >> 5% Tween-80 >> 45% saline Solubility: ≥ 2.5 mg/mL (5.60 mM); Clear solution				

### BIOLOGICAL ACTIVITY

Description	VU0483605 is a potent and brain-penetrated mGlu <sub>1</sub> receptor positive allosteric modulator (PAM). VU0483605 shows excellent mGlu <sub>1</sub> PAM activity at both human and rat, with EC <sub>50</sub> values of 390 and 356 nM, respectively <sup>[1]</sup> .		
IC <sub>50</sub> & Target	Human mGluR1 390 nM (EC50)	rat mGluR1 356 nM (EC50)	Human mGlu <sub>4</sub> >10 μM (EC50)
In Vitro	VU0483605 proves superior with excellent mGlu <sub>1</sub> PAM activity at both human (EC <sub>50</sub> = 390 nM) and rat (EC <sub>50</sub> = 356 nM, pEC <sub>50</sub> = 6.45 ± 0.11, 113 ± 5% Glu Max) and no activity as an mGlu <sub>4</sub> PAM (EC <sub>50</sub> >10 μM) <sup>[1]</sup> . MCE has not independently confirmed the accuracy of these methods. They are for reference only.		

### REFERENCES

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[1]. Cho HP, Garcia-Barrantes PM, Brogan JT, et al. Chemical modulation of mutant mGlu1 receptors derived from deleterious GRM1 mutations found in schizophrenics. ACS Chem Biol. 2014;9(10):2334-2346.

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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