# **Product** Data Sheet

#### LY487379

Molecular Weight: 452.45
Target: mGluR

Pathway: GPCR/G Protein; Neuronal Signaling

Storage: Powder -20°C 3 years

In solvent -80°C 6 months

-20°C 1 month

## **SOLVENT & SOLUBILITY**

In Vitro

DMSO: 100 mg/mL (221.02 mM; Need ultrasonic)

Preparing Stock Solutions	Solvent Mass Concentration	1 mg	5 mg	10 mg
	1 mM	2.2102 mL	11.0509 mL	22.1019 mL
	5 mM	0.4420 mL	2.2102 mL	4.4204 mL
	10 mM	0.2210 mL	1.1051 mL	2.2102 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: ≥ 10 mg/mL (22.10 mM); Clear solution

## **BIOLOGICAL ACTIVITY**

Description	LY487379 is a selective human mGluR2 positive allosteric modulator (PAM). LY487379 potentiates glutamate-stimulated [ $^{35}$ S]GTP $_{\gamma}$ S binding with EC $_{50}$ values of 1.7 $_{\mu}$ M and >10 $_{\mu}$ M for mGlu2 and mGlu3 receptors respectively. LY487379 promotes cognitive flexibility and facilitates behavioral inhibition in a rat model. LY487379 can be used for schizophrenia research[ $^{2}$ ].
In Vivo	LY487379 (intraperitoneal injection; 30 mg/kg; injected 30 min before the test) requires significantly fewer trials to criterion during the ED phase of the ASST in attentional set-shifting task in male Sprague-Dawley rats. But there has no significant drug effect during any other discrimination stage <sup>[1]</sup> .  LY487379 hydrochloride (intraperitoneal injection; 10-30 mg/kg) induces an increase in microdialysate norepinephrine levels; the dose-effect resembled a bell-shape relationship increased. And it dose-dependently increases extracellular serotonin levels in the medial prefrontal cortex in male Sprague-Dawley rats <sup>[1]</sup> .  MCE has not independently confirmed the accuracy of these methods. They are for reference only.

#### **REFERENCES**

- [1]. Nikiforuk A, et al. Effects of a positive allosteric modulator of group II metabotropic glutamate receptors, LY487379, on cognitive flexibility and impulsive-like responding in rats. J Pharmacol Exp Ther. 2010;335(3):665-673.
- [2]. Schaffhauser H, et al. Pharmacological characterization and identification of amino acids involved in the positive modulation of metabotropic glutamate receptor subtype 2. Mol Pharmacol. 2003;64(4):798-810.

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

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