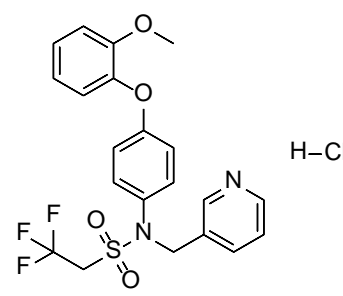


Product data sheet



MedKoo Cat#: 530679 Name: LY487379 HCl CAS: 353229-59-1 (HCl) Chemical Formula: C ₂₁ H ₂₀ ClF ₃ N ₂ O ₄ S Molecular Weight: 488.9062		
Product supplied as:	Powder	
Purity (by HPLC):	≥ 98%	
Shipping conditions	Ambient temperature	
Storage conditions:	Powder: -20°C 3 years; 4°C 2 years. In solvent: -80°C 3 months; -20°C 2 weeks.	

1. Product description:

LY-487379 is a drug used in scientific research that acts as a selective positive allosteric modulator for the metabotropic glutamate receptor group II subtype mGluR2. It is used to study the structure and function of this receptor subtype, and LY-487,379 along with various other mGluR2/3 agonists and positive modulators are being investigated as possible antipsychotic and anxiolytic drugs.

2. CoA, QC data, SDS, and handling instruction

SDS and handling instruction, CoA with copies of QC data (NMR, HPLC and MS analytical spectra) can be downloaded from the product web page under “QC And Documents” section. Note: copies of analytical spectra may not be available if the product is being supplied by MedKoo partners. Whether the product was made by MedKoo or provided by its partners, the quality is 100% guaranteed.

3. Solubility data

Solvent	Max Conc. mg/mL	Max Conc. mM
DMSO	48.89	100.0
Ethanol	24.45	50.0

4. Stock solution preparation table:

Concentration / Solvent Volume / Mass	1 mg	5 mg	10 mg
1 mM	2.05 mL	10.23 mL	20.45 mL
5 mM	0.41 mL	2.05 mL	4.09 mL
10 mM	0.21 mL	1.02 mL	2.05 mL
50 mM	0.04 mL	0.21 mL	0.41 mL

5. Molarity Calculator, Reconstitution Calculator, Dilution Calculator

Please refer the product web page under section of “Calculator”

6. Recommended literature which reported protocols for in vitro and in vivo study

In vitro study

- Schaffhauser H, Rowe BA, Morales S, Chavez-Noriega LE, Yin R, Jachec C, Rao SP, Bain G, Pinkerton AB, Vernier JM, Bristow LJ, Varney MA, Daggett LP. Pharmacological characterization and identification of amino acids involved in the positive modulation of metabotropic glutamate receptor subtype 2. *Mol Pharmacol.* 2003 Oct;64(4):798-810. doi: 10.1124/mol.64.4.798. PMID: 14500736.
- Johnson MP, Baez M, Jagdmann GE Jr, Britton TC, Large TH, Callagaro DO, Tizzano JP, Monn JA, Schoepp DD. Discovery of allosteric potentiators for the metabotropic glutamate 2 receptor: synthesis and subtype selectivity of N-(4-(2-methoxyphenoxy)phenyl)-N-(2,2,2-trifluoroethylsulfonyl)pyrid-3-ylmethylamine. *J Med Chem.* 2003 Jul 17;46(15):3189-92. doi: 10.1021/jm034015u. PMID: 12852748.

In vivo study

- Mao LM, Mathur N, Wang JQ. An allosteric potentiator of metabotropic glutamate (mGlu) 2 receptors reduces the cocaine-stimulated ERK1/2 phosphorylation in the mouse striatum. *Neurosci Lett.* 2023 Jan 31;795:137028. doi: 10.1016/j.neulet.2022.137028. Epub 2022 Dec 21. PMID: 36565803; PMCID: PMC9870709.
- Nikiforuk A, Popik P, Drescher KU, van Gaalen M, Relo AL, Mezler M, Marek G, Schoemaker H, Gross G, Bessalov A. Effects of a positive allosteric modulator of group II metabotropic glutamate receptors, LY487379, on cognitive flexibility and impulsive-like

Product data sheet



responding in rats. J Pharmacol Exp Ther. 2010 Dec;335(3):665-73. doi: 10.1124/jpet.110.170506. Epub 2010 Aug 25. PMID: 20739457.

7. Bioactivity

Biological target:

LY487379 hydrochloride is a selective human mGluR2 positive allosteric modulator (PAM).

In vitro activity

However, LY487379 markedly potentiated glutamate-stimulated [35S]GTPgammaS binding in a concentration-dependent manner at hmGluR2, shifting the glutamate dose-response curve leftward by 3-fold and increasing the maximum levels of [35S]GTPgammaS stimulation. This effect of LY487479 was also observed to a greater extent on the concentration-response curves to selective hmGluR2/3 agonists.

Reference: Mol Pharmacol. 2003 Oct;64(4):798-810. <https://pubmed.ncbi.nlm.nih.gov/14500736/>

In vivo activity

Rats treated with LY487379 (30 mg/kg) required significantly fewer trials to criteria during the extradimensional shift phase of the ASST. LY487379 significantly enhanced extracellular norepinephrine and serotonin levels in the medial prefrontal cortex. In summary, the present study demonstrates that a mGluR2 PAM, LY487379, promotes cognitive flexibility and facilitates behavioral inhibition.

Reference: J Pharmacol Exp Ther. 2010 Dec;335(3):665-73. <https://pubmed.ncbi.nlm.nih.gov/20739457/>

Note: The information listed here was extracted from literature. MedKoo has not independently retested and confirmed the accuracy of these methods. Customer should use it just for a reference only.