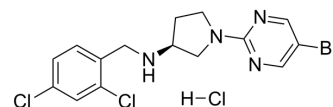


LY2389575 hydrochloride

Cat. No.:	HY-107509		
CAS No.:	885104-09-6		
Molecular Formula:	C ₁₅ H ₁₆ BrCl ₃ N ₄		
Molecular Weight:	438.58		
Target:	mGluR		
Pathway:	GPCR/G Protein; Neuronal Signaling		
Storage:	Powder	-20°C	3 years
		4°C	2 years
	In solvent	-80°C	6 months
		-20°C	1 month



SOLVENT & SOLUBILITY

In Vitro

DMSO : 100 mg/mL (228.01 mM; ultrasonic and warming and heat to 60°C)
 Methanol : 8.33 mg/mL (18.99 mM; ultrasonic and warming and heat to 60°C)

Preparing Stock Solutions	Solvent Concentration	Mass		
		1 mg	5 mg	10 mg
	1 mM	2.2801 mL	11.4004 mL	22.8009 mL
	5 mM	0.4560 mL	2.2801 mL	4.5602 mL
	10 mM	0.2280 mL	1.1400 mL	2.2801 mL

Please refer to the solubility information to select the appropriate solvent.

In Vivo

- Add each solvent one by one: 10% DMSO >> 40% PEG300 >> 5% Tween-80 >> 45% saline
 Solubility: ≥ 2.5 mg/mL (5.70 mM); Clear solution
- Add each solvent one by one: 10% DMSO >> 90% (20% SBE-β-CD in saline)
 Solubility: ≥ 2.5 mg/mL (5.70 mM); Clear solution
- Add each solvent one by one: 10% DMSO >> 90% corn oil
 Solubility: ≥ 2.5 mg/mL (5.70 mM); Clear solution

BIOLOGICAL ACTIVITY

Description

LY2389575 hydrochloride is a selective and noncompetitive mGlu3 negative allosteric modulator (NAM), with an IC₅₀ value of 190 nM. LY2389575 hydrochloride induces an increase in Mrc1 levels. LY2389575 hydrochloride also independently amplifies Amyloid beta (Aβ) toxicity and can be used in study of Alzheimer's disease^{[1][2][3]}.

IC₅₀ & Target

mGluR3
 190 nM (IC₅₀)

In Vitro

LY2389575 hydrochloride (5 μ M; 1 h) induces an increase in Mrc1 levels in microglial cells^[2].
MCE has not independently confirmed the accuracy of these methods. They are for reference only.
Real Time qPCR^[2]

Cell Line:	Microglial cells
Concentration:	5 μ M
Incubation Time:	1 h
Result:	Increased levels of Mrc1.

REFERENCES

- [1]. Caraci F, et al. Targeting group II metabotropic glutamate (mGlu) receptors for the treatment of psychosis associated with Alzheimer's disease: selective activation of mGlu2 receptors amplifies beta-amyloid toxicity in cultured neurons, whereas dual activation of mGlu2 and mGlu3 receptors is neuroprotective. *Mol Pharmacol.* 2011 Mar;79(3):618-26.
- [2]. Zinni M, et al. mGlu3 receptor regulates microglial cell reactivity in neonatal rats. *J Neuroinflammation.* 2021 Jan 6;18(1):13.
- [3]. Srivastava A, et al. Metabotropic Glutamate Receptors in Alzheimer's Disease Synaptic Dysfunction: Therapeutic Opportunities and Hope for the Future. *J Alzheimers Dis.* 2020;78(4):1345-1361.

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

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