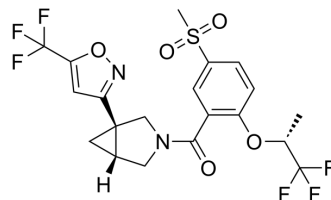


Iclepertin

Cat. No.:	HY-138935		
CAS No.:	1421936-85-7		
Molecular Formula:	C ₂₀ H ₁₈ F ₆ N ₂ O ₅ S		
Molecular Weight:	512.42		
Target:	GlyT		
Pathway:	Membrane Transporter/Ion Channel; 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 : 11.36 mg/mL (22.17 mM; ultrasonic and warming and heat to 60°C)

Solvent	Mass	Concentration		
		1 mg	5 mg	10 mg
Preparing Stock Solutions	1 mM	1.9515 mL	9.7576 mL	19.5152 mL
	5 mM	0.3903 mL	1.9515 mL	3.9030 mL
	10 mM	0.1952 mL	0.9758 mL	1.9515 mL

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

BIOLOGICAL ACTIVITY

Description

Iclepertin (BI-425809) is a potent, selective and orally active glycine transporter 1 (GlyT1) inhibitor. Iclepertin is inactive against GlyT2. Iclepertin can be used for Alzheimer disease and schizophrenia research^[1].

IC₅₀ & Target

GLT1 5.2 mM (IC ₅₀ , In rat primary neurons)	GLT1 5 nM (IC ₅₀ , In human SK-N-MC cells)
--	--

In Vitro

Iclepertin inhibits GlyT1 with the IC₅₀ values of 5.2 nM in rat primary neurons and 5.0 nM in human SK-N-MC cells^[1]. MCE has not independently confirmed the accuracy of these methods. They are for reference only.

In Vivo

Single oral administration of Iclepertin induced a dose-dependent increase of glycine cerebrospinal fluid (CSF) levels. Oral administration of Iclepertin in rats induced a dose-dependent increase of glycine CSF levels from 30% (0.2 mg/kg, not significant) to 78% (2 mg/kg), relative to vehicle^[1]. MCE has not independently confirmed the accuracy of these methods. They are for reference only.

REFERENCES

[1]. Holger Rosenbrock, et al. Evaluation of Pharmacokinetics and Pharmacodynamics of BI 425809, a Novel GlyT1 Inhibitor: Translational Studies. Clin Transl Sci. 2018 Nov;11(6):616-623.

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

Address: 1 Deer Park Dr, Suite Q, Monmouth Junction, NJ 08852, USA