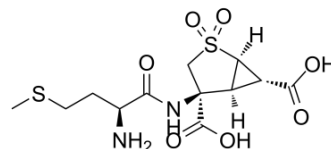


## LY2140023

<b>Cat. No.:</b>	HY-14554
<b>CAS No.:</b>	635318-55-7
<b>Molecular Formula:</b>	C <sub>12</sub> H <sub>18</sub> N <sub>2</sub> O <sub>7</sub> S <sub>2</sub>
<b>Molecular Weight:</b>	366.41
<b>Target:</b>	mGluR
<b>Pathway:</b>	GPCR/G Protein; Neuronal Signaling
<b>Storage:</b>	Please store the product under the recommended conditions in the Certificate of Analysis.



### SOLVENT & SOLUBILITY

<b>In Vitro</b>	DMSO : 13.33 mg/mL (36.38 mM; Need ultrasonic)					
	H <sub>2</sub> O : < 0.1 mg/mL (insoluble)					
	<b>Preparing Stock Solutions</b>	<b>Solvent</b>	<b>Mass</b>	<b>1 mg</b>	<b>5 mg</b>	<b>10 mg</b>
		<b>Concentration</b>				
		<b>1 mM</b>		2.7292 mL	13.6459 mL	27.2918 mL
<b>5 mM</b>			0.5458 mL	2.7292 mL	5.4584 mL	
<b>10 mM</b>		0.2729 mL	1.3646 mL	2.7292 mL		
Please refer to the solubility information to select the appropriate solvent.						
<b>In Vivo</b>	1. Add each solvent one by one: 10% DMSO >> 40% PEG300 >> 5% Tween-80 >> 45% saline Solubility: ≥ 1.33 mg/mL (3.63 mM); Clear solution					
	2. Add each solvent one by one: 10% DMSO >> 90% (20% SBE-β-CD in saline) Solubility: 1.33 mg/mL (3.63 mM); Suspended solution; Need ultrasonic					
	3. Add each solvent one by one: 10% DMSO >> 90% corn oil Solubility: ≥ 1.33 mg/mL (3.63 mM); Clear solution					

### BIOLOGICAL ACTIVITY

<b>Description</b>	LY2140023 is an orally active prodrug of LY404039. LY404039 is a selective metabotropic glutamate 2/3 receptor agonist. LY2140023 has the potential for schizophrenia <sup>[1]</sup> .	
<b>IC<sub>50</sub> &amp; Target</b>	mGluR2	mGluR3
<b>In Vivo</b>	LY2140023 (orally; 3, 10, and 300 mg/kg; once daily for 7 days) dose-dependent increases the levels of the dopamine metabolites dihydroxyphenylacetic acid (DOPAC) and homovanillic acid (HVA) <sup>[1]</sup> . MCE has not independently confirmed the accuracy of these methods. They are for reference only.	

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Animal Model:	Male Fischer rats (approximately 250 g) <sup>[1]</sup>
Dosage:	3, 10, and 300 mg/kg
Administration:	Orally; once daily for 7 days
Result:	Dose-dependent increased the levels of the dopamine metabolites DOPAC and HVA.

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## REFERENCES

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[1]. Lowe S, et al. Effects of a novel mGlu<sub>2/3</sub> receptor agonist prodrug, LY2140023 monohydrate, on central monoamine turnover as determined in human and rat cerebrospinal fluid. *Psychopharmacology (Berl)*. 2012 Feb;219(4):959-70.

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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