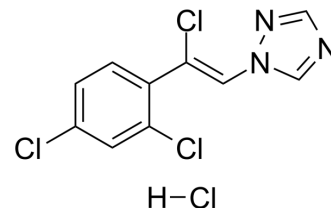


Loreclezole hydrochloride

Cat. No.:	HY-105272A
CAS No.:	2227372-56-5
Molecular Formula:	C ₁₀ H ₇ Cl ₄ N ₃
Molecular Weight:	310.99
Target:	GABA Receptor
Pathway:	Membrane Transporter/Ion Channel; Neuronal Signaling
Storage:	Please store the product under the recommended conditions in the Certificate of Analysis.



BIOLOGICAL ACTIVITY

Description	Loreclezole hydrochloride, an antiepileptic compound, is a selective GABA _A receptor modulator and acts as a positive allosteric modulator of β2 or β3-subunit containing receptors ^{[1][2]} .								
IC₅₀ & Target	GABA _A receptor ^[1] .								
In Vivo	<p>Loreclezole (10, 25, 50 or 75 mg/kg, i.p. 60 min before measurement of seizure threshold) results in a dosedependent rise in seizure threshold as measured by the dose of pentylenetetrazolrequired to produce a convulsion 60 min later. Loreclezole also has the least effect on loss of muscle tone as measured by the “pull-up” test^[3].</p> <p>MCE has not independently confirmed the accuracy of these methods. They are for reference only.</p> <table border="1"> <tr> <td>Animal Model:</td> <td>Adult male Lister Hooded rats^[3].</td> </tr> <tr> <td>Dosage:</td> <td>10, 25, 50 or 75 mg/kg.</td> </tr> <tr> <td>Administration:</td> <td>IP, 60 min before measurement of seizure threshold.</td> </tr> <tr> <td>Result:</td> <td>Resulted in a dosedependent rise in seizure threshold as measured by the dose of pentylenetetrazolrequired to produce a convulsion 60 min later.</td> </tr> </table>	Animal Model:	Adult male Lister Hooded rats ^[3] .	Dosage:	10, 25, 50 or 75 mg/kg.	Administration:	IP, 60 min before measurement of seizure threshold.	Result:	Resulted in a dosedependent rise in seizure threshold as measured by the dose of pentylenetetrazolrequired to produce a convulsion 60 min later.
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REFERENCES

- [1]. Wingrove PB, et al. The modulatory action of loreclezole at the gamma-aminobutyric acid type A receptor is determined by a single amino acid in the beta 2 and beta 3 subunit. *Proc Natl Acad Sci U S A*. 1994 May 10;91(10):4569-73.
- [2]. Sanna E, et al. Direct activation of GABA_A receptors by loreclezole, an anticonvulsant drug with selectivity for the beta-subunit. *Neuropharmacology*. 1996;35(12):1753-60.
- [3]. Green AR, et al. A behavioural and neurochemical study in rats of the pharmacology of loreclezole, a novel allosteric modulator of the GABA_A receptor. *Neuropharmacology*. 1996;35(9-10):1243-50.

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