Product Data Sheet

(±)-threo-3-Methylglutamic acid

Cat. No.: HY-101227

CAS No.: 63088-04-0Molecular Formula: $C_eH_{11}NO_4$ Molecular Weight: 161.16Target: EAAT

Pathway: Membrane Transporter/Ion Channel

Storage: Please store the product under the recommended conditions in the Certificate of

Analysis.

BIOLOGICAL ACTIVITY

Description	(\pm)-threo-3-Methylglutamic acid is a potent EAAT2/4 inhibitor. (\pm)-threo-3-Methylglutamic acid also is an ionotropic glutamate receptor agonist. (\pm)-threo-3-Methylglutamic acid inhibits glutamate uptake by rod outer segments [1][2].	
IC ₅₀ & Target	EAAT2	EAAT4
In Vitro	(\pm)-threo-3-Methylglutamic acid (0-300 μ M) inhibits glutamate uptake by rod outer segments in a concentration-dependent manner with an IC ₅₀ value of 38.35 μ M ^[2] . MCE has not independently confirmed the accuracy of these methods. They are for reference only.	

REFERENCES

[1]. Eliasof S, et al. Pharmacological characterization of threo-3-methylglutamic acid with excitatory amino acid transporters in native and recombinant systems. J Neurochem. 2001 Apr;77(2):550-7.

[2]. Pignataro L, et al. Nonsynaptic localization of the excitatory amino acid transporter 4 in photoreceptors. Mol Cell Neurosci. 2005 Mar;28(3):440-51.

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

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