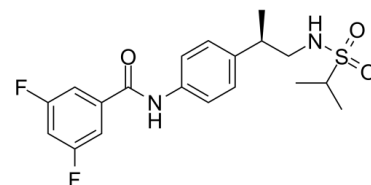


Data Sheet

Product Name:	LY450108
Cat. No.:	CS-1090
CAS No.:	376594-67-1
Molecular Formula:	C ₁₉ H ₂₂ F ₂ N ₂ O ₃ S
Molecular Weight:	396.45
Target:	iGluR
Pathway:	Membrane Transporter/Ion Channel; Neuronal Signaling
Solubility:	DMSO : ≥ 50 mg/mL (126.12 mM); H ₂ O : < 0.1 mg/mL (insoluble)



BIOLOGICAL ACTIVITY:

LY450108 is an alpha-amino-3-hydroxy-5-methyl-4-isoxazole-propionic acid (AMPA) receptor potentiator. IC₅₀ value: Target: AMPA receptors mediate most of the excitatory neurotransmission and play a key role in synaptic plasticity in the mammalian central nervous system (CNS). Recent evidence has shown that in addition to modulating fast synaptic plasticity and memory processes, AMPA receptor potentiators alter downstream signalling pathways and may thereby have utility in other CNS disorders.

References:

- [1]. Simon E Ward¹, Benjamin D Bax, Mark Harries. Challenges for and current status of research into positive modulators of AMPA receptors. British Journal of Pharmacology. 2010;160(2):181-190.
- [2]. O'Neill MJ, Witkin JM. AMPA receptor potentiators: application for depression and Parkinson's disease. Curr Drug Targets. 2007 May;8(5):603-20.
- [3]. Jhee SS, Chappell AS, Zarotsky V, et al. Multiple-dose plasma pharmacokinetic and safety study of LY450108 and LY451395 (AMPA receptor potentiators) and their concentration in cerebrospinal fluid in healthy human subjects. J Clin Pharmacol. 2006 Apr;46(4):424-32.
- [4]. Douglas A. Schober, Martin B. Gill, Hong Yu, et al. Transmembrane AMPA Receptor Regulatory Proteins and Cornichon-2 Allosterically Regulate AMPA Receptor Antagonists and Potentiators. The Journal of Biological Chemistry, 286, 13134-13142.

CAIndexNames:

Benzamide, 3,5-difluoro-N-[4-[(1R)-1-methyl-2-[[[(1-methylethyl)sulfonyl]amino]ethyl]phenyl]-

SMILES:

FC1=CC(F)=CC(C(NC2=CC=C([C@H](C)CNS(C(C)C)(=O)=O)C=C2)=O)=C1

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

Tel: 732-484-9848 Fax: 888-484-5008 E-mail: sales@ChemScene.com

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