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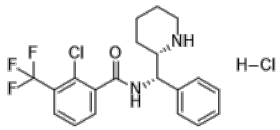
Data Sheet

Global Supplier of Chemical Probes, Inhibitors & Agonists.

Product Name	:	SSR504734
Cat. No.	:	PC-24091
CAS No.	:	615571-23-8
Molecular Formula	:	$C_{20}H_{21}Cl_2F_3N_2O$
Molecular Weight	:	433.30
Target	:	Glycine Transporter (GlyT)
Solubility	:	10 mM in DMSO



CAS: 615571-23-8

Biological Activity

SSR504734 is a potent, selective and reversible inhibitor of glycine transporter-1 (GlyT1) with 8, 15, and 38 nM for human, rat, and mouse GlyT1 respectively.
SSR504734 has no effect (IC50>1 μM) on human GlyT2 and D-serine transporters, and on murine proline, glutamate, and GABA transporters.
SSR504734 blocks reversibly the ex vivo uptake of glycine (mouse cortical homogenates: ID50: 5 mg/kg i.p.), rapidly and for a long duration.
SSR504734 increases extracellular levels of glycine in the rat prefrontal cortex (PFC), potentiates NMDA-mediated excitatory postsynaptic currents (EPSCs) in rat hippocampal slices (MEC=0.5 uM) and intrastriatal glycine-induced rotations in mice (MED: 1 mg/kg i.p.).
SSR504734 prevented ketamine-induced metabolic activation in mice limbic areas and reversed MK-801-induced hyperactivity and increase in EEG spectral energy in mice and rats, respectively (MED: 10-30 mg/kg i.p.).
SSR504734 shows activity in schizophrenia, anxiety and depression models.

References

Depoortère R, et al. Neuropsychopharmacology. 2005 Nov;30(11):1963-85.

Leonetti M, et al. Neuroscience. 2006;137(2):555-64.

Caution: Product has not been fully validated for medical applications. Lab Use Only!

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