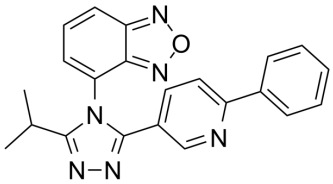
ASP2535

Cat. No.:	HY-110176
CAS No.:	374886-51-8
Molecular Formula:	$C_{22}H_{18}N_6O$
Molecular Weight:	382.42
Target:	GlyT
Pathway:	Membrane Transporter/Ion Channel; Neuronal Signaling
Storage:	Powder -20°C 3 years In solvent -80°C 6 months -20°C 1 month



BIOLOGICAL ACTIVITY

Description	ASP2535 is a potent, orally bioavailable, selective, brain permeable and centrally-active glycine transporter-1 (GlyT1) inhibitor. ASP2535 can improve cognitive impairment in animal models of schizophrenia and Alzheimer's disease[1].
IC_{50} & Target	GlyT1[1]
In Vitro	ASP2535 potently inhibits rat GlyT1 (IC_{50}=92 nM) with 50-fold selectivity over rat glycine transporter-2 (GlyT2) in vitro[1]. MCE has not independently confirmed the accuracy of these methods. They are for reference only.
In Vivo	ASP2535 (0.3-3 mg/kg; p.o) attenuates working memory deficit in MK-801-treated mice and visual learning deficit in neonatally phencyclidine (PCP)-treated mice[1]. ASP2535 (1-3 mg/kg, p.o.) also improves the PCP-induced deficit in prepulse inhibition in rats[1]. MCE has not independently confirmed the accuracy of these methods. They are for reference only.

Animal Model:	5-week-old male ddY mice[1]
Dosage:	0.1 mg/kg, 0.3 mg/kg, 1 mg/kg, 3 mg/kg
Administration:	Oral administration
Result:	Significantly attenuated the MK-801-induced decrease in alternation rate.

REFERENCES

[1]. Harada K, et al. A novel glycine transporter-1 (GlyT1) inhibitor, ASP2535 (4-[3-isopropyl-5-(6-phenyl-3-pyridyl)-4H-1,2,4-triazol-4-yl]-2,1,3-benzoxadiazole), improves cognition in animal models of cognitive impairment in schizophrenia and Alzheimer's dis

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

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