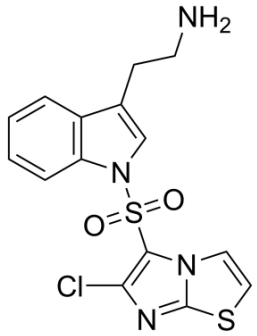
WAY-181187

Cat. No.:	HY-14340
CAS No.:	554403-49-5
Molecular Formula:	$C_{15}H_{13}ClN_4O_2S_2$
Molecular Weight:	380.87
Target:	5-HT Receptor
Pathway:	GPCR/G Protein; Neuronal Signaling
Storage:	Powder -20°C 3 years 4°C 2 years In solvent -80°C 6 months -20°C 1 month



BIOLOGICAL ACTIVITY

Description	WAY-181187 (SAX-187) is a potent and selective full 5-HT6 receptor agonist with a K_i of 2.2 nM and an EC_{50} of 6.6 nM[1]. WAY181187 mediates 5-HT6 receptor-dependent signal pathways, such as cAMP, Fyn and ERK1/2 kinase, as specific agonist [2].

IC_{50} & Target	5-HT_6 Receptor 2.2 nM (Ki)	5-HT_6 Receptor 6.6 nM (EC50)

In Vitro

WAY181187 (1 and 10 μM) increases activation of ERK1/2. WAY181187 also increases Fyn kinase activity[2].

MCE has not independently confirmed the accuracy of these methods. They are for reference only.

Western Blot Analysis[2]

Cell Line:	HEK/HA-5-HT6 receptor cells
Concentration:	1 and 10 μM
Incubation Time:	Pretreatment 5 minutes
Result:	Increased activation of ERK1/2 both at 1 and 10 μM concentrations.

In Vivo

Acute administration of WAY-181187 (3-30 mg/kg, s.c.) significantly increases extracellular GABA concentrations without altering the levels of glutamate or norepinephrine in the rat frontal cortex. Additionally, WAY-181187 (30 mg/kg, s.c.) produces modest yet significant decreases in cortical dopamine and 5-HT levels[1].

MCE has not independently confirmed the accuracy of these methods. They are for reference only.

Animal Model:	Adult male Sprague-Dawley rats weighing 280–350 g[1]
Dosage:	3, 10, or 30 mg/kg
Administration:	Acute dministered by s.c.
Result:	Significantly increased extracellular GABA concentrations without altering the levels of

	glutamate or norepinephrine.

REFERENCES

[1]. Lee E Schechter, et al. Neuropharmacological Profile of Novel and Selective 5-HT6 Receptor Agonists: WAY-181187 and WAY-208466. Neuropsychopharmacology. 2008 May;33(6):1323-35.

[2]. Teresa Riccioni, et al. ST1936 Stimulates cAMP, Ca2+, ERK1/2 and Fyn Kinase Through a Full Activation of Cloned Human 5-HT6 Receptors. Eur J Pharmacol. 2011 Jul 1;661(1-3):8-14.

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