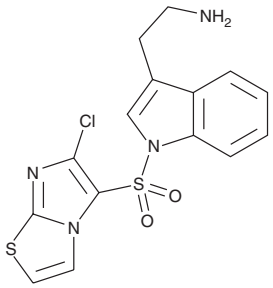
PRODUCT INFORMATION

WAY-181187

Item No. 23461

CAS Registry No.:	554403-49-5
Formal Name:	1-[(6-chloroimidazo[2,1-b]thiazol-5-yl) sulfonyl]-1H-indole-3-ethanamine
Synonym:	SAX 187
MF:	$C_{15}H_{13}ClN_4O_2S_2$
FW:	380.9
Purity:	≥98%
Supplied as:	A solid
Storage:	-20°C
Stability:	≥4 years



Information represents the product specifications. Batch specific analytical results are provided on each certificate of analysis.

Laboratory Procedures

WAY-181187 is supplied as a solid. A stock solution may be made by dissolving the WAY-181187 in the solvent of choice, which should be purged with an inert gas. WAY-181187 is soluble (≥10 mg/ml) in DMSO.

Description

WAY-181187 is an agonist of the serotonin (5-HT) receptor subtype 5-HT_6.[1,2] It increases intracellular cAMP levels in HeLa cells expressing 5-HT_6 (EC_{50} = 6.5 nM).[2] WAY-181187 selectively binds to 5-HT_6 over 5-HT_{2B}, 5-HT_{2C}, and 5-HT_7 (K_is = 2,458, 124, and 679 nM, respectively). It is also selective for 5-HT_6 over a panel of 31 receptors and ion channels at 100 nM. It increases extracellular GABA levels in the rat frontal cortex when administered at a dose of 10 mg/kg. WAY-181187 (178 mg/kg) reduces schedule-induced polydipsia, an adjunctive model of compulsive disorder, in rats. It also reduces immobility in a modified forced swim test in rats when administered at a dose of 17 mg/kg, indicating antidepressant-like activity, and reduces the duration of defensive burying in rats at 10 and 17 mg/kg, indicating anxiolytic-like activity.[3]

References

1. Schechter, L.E., Lin, Q., Smith, D.L., *et al.* Neuropharmacological profile of novel and selective 5-HT_6 receptor agonists: WAY-181187 and WAY-208466. *Neuropsychopharmacology* **33(6)**, 1323-1335 (2008).
2. Cole, D.C., Stock, J.R., Lennox, W.J., *et al.* Discovery of N1-(6-chloroimidazo[2,1-*b*][1,3] thiazole-5-sulfonyl)tryptamine as a potent, selective, and orally active 5-HT_6 receptor agonist. *J. Med. Chem.* **50(23)**, 5535-5538 (2007).
3. Carr, G.V., Schechter, L.E., and Lucki, I. Antidepressant and anxiolytic effects of selective 5-HT_6 receptor agonists in rats. *Psychopharmacology (Berl)* **213(2-3)**, 499-507 (2011).

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