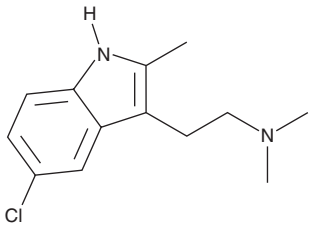
PRODUCT INFORMATION

ST1936

Item No. 39811

CAS Registry No.:	1210-81-7
Formal Name:	5-chloro-N,N,2-trimethyl-1H-indole-3-ethanamine
MF:	$C_{13}H_{17}ClN_2$
FW:	236.7
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

ST1936 is supplied as a solid. A stock solution may be made by dissolving the ST1936 in the solvent of choice, which should be purged with an inert gas. ST1936 is soluble in the organic solvent acetonitrile.

Description

ST1936 is an agonist of the serotonin (5-HT) receptor subtype 5-HT_6.[1,2] It selectively binds to 5-HT_6 (K_i = 31 nM) over 5-HT_{1A}, 5-HT_{1B}, 5-HT_{1D}, 5-HT_{2A}, 5-HT_{2B}, 5-HT_{2C}, 5-HT_3, 5-HT_4, 5-HT_{5A}, and the serotonin transporter (SERT; K_is = >1,000 nM for all) but also binds to the 5-HT_7 receptor (K_i = 168 nM).[1] ST1936 induces cAMP accumulation in BHK fibroblasts (EC_{50} = 16 nM).[2] It decreases the basal firing rate of dopaminergic neurons in the ventral tegmental area but not substantia nigra pars compacta in rats in a dose-dependent manner.[3] ST1936 (10 and 30 mg/kg) prevents stress-induced decreases in vanilla sugar-sustained appetitive behavior, indicating anti-anhedonic-like activity, in rats.[4] It induces self-administration in rats when administered at a dose of 1 mg/kg.[5]

References

1. Di Cesare, M.A., Minetti, P., Tarzia, G., *et al.* 5-halo-tryptamine derivatives used as ligands of the 5-HT_6 and/or 5-HT_7 serotonin receptors. **WO 03/000252 Al** (2003).
2. Mattsson, C., Sonesson, C., Sandahl, A., *et al.* 2-Alkyl-3-(1,2,3,6-tetrahydropyridin-4-yl)-1H-indoles as novel 5-HT_6 receptor agonists. *Bioorg. Med. Chem. Lett.* **15(19)**, 4230-4234 (2005).
3. Borsini, F., Bordi, F., Poggi, A., *et al.* Effects of ST1936, a selective serotonin-6 agonist, on electrical activity of putative mesencephalic dopaminergic neurons in the rat brain. *J. Psychopharmacol.* **29(7)**, 802-811 (2015).
4. Scheggi, S., Marchese, G., Borsini, F., *et al.* Effects of the 5-HT6 receptor agonist ST 1936 on depression- and anhedonia-like experimental models. *Behav. Brain Res.* **224(1)**, 35-43 (2011).
5. Valentini, V., Piras, G., De Luca, M.A., *et al.* Evidence for a role of a dopamine/5-HT6 receptor interaction in cocaine reinforcement. *Neuropharmacology* **65**, 58-64 (2013).

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