

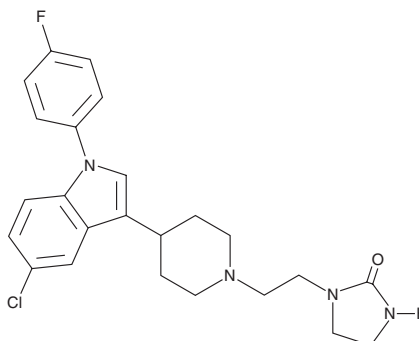
PRODUCT INFORMATION



Sertindole

Item No. 23883

CAS Registry No.: 106516-24-9
Formal Name: 1-[2-[4-[5-chloro-1-(4-fluorophenyl)-1H-indol-3-yl]-1-piperidinyl]ethyl]-2-imidazolidinone
MF: C₂₄H₂₆ClFN₄O
FW: 440.9
Purity: ≥95%
UV/Vis.: λ_{max}: 228, 260, 300 nm
Supplied as: A crystalline 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

Sertindole is supplied as a crystalline solid. A stock solution may be made by dissolving the sertindole in the solvent of choice. Sertindole is soluble in organic solvents such as DMSO and dimethyl formamide (DMF), which should be purged with an inert gas. The solubility of sertindole in these solvents is approximately 5 and 15 mg/ml, respectively.

Sertindole is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, sertindole should first be dissolved in DMF and then diluted with the aqueous buffer of choice. Sertindole has a solubility of approximately 0.25 mg/ml in a 1:3 solution of DMF:PBS (pH 7.2) using this method. We do not recommend storing the aqueous solution for more than one day.

Description

Sertindole is an atypical antipsychotic that binds to dopamine D₂ receptors and the serotonin (5-HT) receptor subtypes 5-HT_{1D}, 5-HT_{2A}, and 5-HT_{2C} (K_ds = 2.7, 20, 0.14, and 6 nM, respectively).¹ It also binds to histamine H₁ and α₁- and α₂-adrenergic receptors (K_ds = 320, 3.9, and 190 nM, respectively). *In vivo*, sertindole (10 mg/kg) increases extracellular dopamine, acetylcholine (ACh), and glutamate levels in the medial prefrontal cortex in conscious rats.² Sertindole (2.5 mg/kg) reverses ketamine-induced impairments in the extradimensional shift stage of the attentional set-shifting task (ASST) in rats.³ It reverses phencyclidine (PCP)-induced selective reversal learning deficits in rats and subchronic PCP-induced deficits in the novel object recognition task in mice.⁴ Sertindole (0.02-0.32 mg/kg) also prevents accuracy deficits and anticipatory over-responding in the 5-choice serial reaction time task (5CSRTT) induced by the NMDA receptor antagonist (R)-CPP (Item No. 21569) in rats.⁵ Formulations containing sertindole have been used in the treatment of schizophrenia.

References

1. Richelson, E. and Souder, T. *Life Sciences* **68(1)**, 29-39 (2000).
2. Mørk, A., Witten, L.M., and Arnt, J. *Psychopharmacol. (Berl)*. **206(1)**, 39-49 (2009).
3. Nikiforuk, A. and Popik, P. *Psychopharmacol. (Berl)*. **220(1)**, 65-74 (2012).
4. Idris, N., Neill, J., Grayson, B., et al. *Psychopharmacol. (Berl)*. **208(1)**, 23-36 (2010).
5. Carli, M., Calcagno, E., Mainini, E., et al. *Psychopharmacol. (Berl)*. **214(3)**, 625-37 (2011).

WARNING

THIS PRODUCT IS FOR RESEARCH ONLY - NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

SAFETY DATA

This material should be considered hazardous until further information becomes available. Do not ingest, inhale, get in eyes, on skin, or on clothing. Wash thoroughly after handling. Before use, the user must review the complete Safety Data Sheet, which has been sent via email to your institution.

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