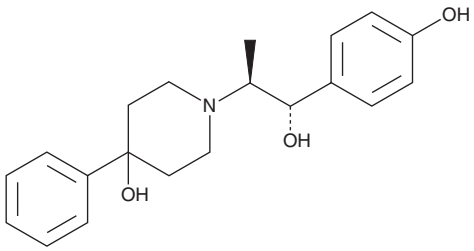
PRODUCT INFORMATION

(+)-CP 101,606

Item No. 23884

CAS Registry No.:	134234-12-1
Formal Name:	4-hydroxy-αS-(4-hydroxyphenyl)-βS-methyl-4-phenyl-1-piperidineethanol
Synonym:	CP 98,113
MF:	$C_{20}H_{25}NO_3$
FW:	327.4
Purity:	≥98%
UV/Vis.:	λ_{max}: 227, 279 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

(+)-CP 101,606 is supplied as a crystalline solid. A stock solution may be made by dissolving the (+)-CP 101,606 in the solvent of choice, which should be purged with an inert gas. (+)-CP 101,606 is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide (DMF). The solubility of (+)-CP 101,606 in ethanol and DMSO is approximately 2 mg/ml and approximately 10 mg/ml in DMF.

Description

CP 101,606 is a noncompetitive antagonist of NMDA receptors containing the NR2B subunit (K_d = 4.2 nM).[1] CP 101,606 is highly selective for NR1/NR2B-containing NMDA receptors over NR1, NR2A, and NR2B subunits alone and NR1/NR2A receptors in HEK293 cell homogenates. *In vivo*, CP 101,606 (30 mg/kg, s.c.) inhibits mechanical hyperalgesia following carrageenan challenge in rats.[2] It also inhibits licking behavior in rats induced by capsaicin (Item No. 92350) and phorbol-12-myristate-13-acetate (PMA; Item No. 10008014; ED_{50}s = 7.5 and 5.7 mg/kg, respectively). CP 101,606 reverses catalepsy in rats induced by haloperidol (Item No. 12014) with an ED_{50} value of 0.4 mg/kg.[3] CP 101,606 (1 mg/kg, s.c.) alone or in combination with L-DOPA methyl ester (Item No. 16149) temporarily improves parkinsonian symptoms in an MPTP model of Parkinson's disease in rhesus monkeys.

References

1. Chazot, P.L., Lawrence, S., and Thompson, C.L. Studies on the subtype selectivity of CP-101,606: Evidence for two classes of NR2B-selective NMDA receptor antagonists. *Neuropharmacology* **42(3)**, 319-324 (2002).
2. Taniguchi, K., Shinjo, K., Mizutani, M., *et al.* Antinociceptive activity of CP-101,606, an NMDA receptor NR2B subunit antagonist. *Br. J. Pharmacol.* **122(5)**, 809-812 (1997).
3. Steece-Collier, K., Chambers, L.K., Jaw-Tsai, S.S., *et al.* Antiparkinsonian actions of CP-101,606, an antagonist of NR2B subunit-containing N-methyl-d-aspartate receptors. *Exp. Neurol.* **163(1)**, 239-243 (2000).

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