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DATASHEET

SKF 38393 hydrobromide

Product overview

Name	SKF 38393 hydrobromide
Cat No	HB1840
Biological action	Agonist
Purity	>98%
Description	Prototypic, selective D_1-like receptor partial agonist

Biological Data

Biological description

Prototypic, selective D_1-like dopamine receptor partial agonist (K_i values are 1 and ~ 0.5 nM at D_1-like receptors (D_1 and D_5) and ~ 150, ~ 5000 and ~ 1000 nM at D_2-like receptors (D_2, D_3 and D_4) respectively).

SKF 38393 facilitates long term potentiation (LTP) via D_1 and D_5 activation and has also been shown to presynaptically stimulate glutamate release in the hippocampus.

Additionally activates the HPA axis to increase ACTH and corticosterone levels.

Shows proconvulsant and anorexic effects.

Blood brain barrier permeable.

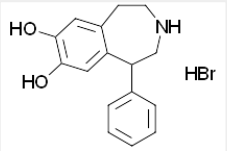
Active in vivo.

SKF 38393 hydrochloride also available.

Solubility & Handling

Storage instructions	-20°C (desiccate)
Solubility overview	Soluble in water (25 mM, warming) and in DMSO (100 mM)
Important	This product is for RESEARCH USE ONLY and is not intended for therapeutic or diagnostic use. Not for human or veterinary use.

Chemical Data

Chemical name	(±)-1-Phenyl-2,3,4,5-tetrahydro-(1*H*)-3-benzazepine-7,8-diol hydrobromide
Molecular Weight	336.23
Chemical structure	
Molecular Formula	$C_{16}H_{17}NO_2$.HBr
CAS Number	20012-10-6
PubChem identifier	12928470

SMILES	C1CNCC(C2=CC(=C(C=C21)O)O)C3=CC=CC=C3.Br
Source	Synthetic
InChi	InChI=1S/C16H17NO2.BrH/c18-15-8-12-6-7-17-10-14(13(12)9-16(15)19)11-4-2-1-3-5-11;/h1-5,8-9,14,17-19H,6-7,10H2;1H
InChiKey	INNWVRBZMBCEJI-UHFFFAOYSA-N
Appearance	White solid

References

Cloning of the gene for a human dopamine D5 receptor with higher affinity for dopamine than D1.

Sunahara RK *et al* (1991) Nature 350(6319)
PubMedID 1826762

The anorectic effect of SK&F 38393, a selective dopamine D1 receptor agonist: a microstructural analysis of feeding and related behaviour.

Cooper SJ *et al* (1990) Psychopharmacology (Berl) 100(2)
PubMedID 1968277

Effects of quinpirole and SKF 38393 alone and in combination in squirrel monkeys trained to discriminate cocaine.

Katz JL *et al* (1992) Psychopharmacology (Berl) 107(2-3)
PubMedID 1352052

Dopamine receptor pharmacology.

Seeman and Van Tol (1994) Trends Pharmacol Sci. 15(5)
PubMedID 7940991

D1/5 receptor-mediated enhancement of LTP requires PKA, Src family kinases, and NR2B-containing NMDARs.

Stramiello and Wagner (2008) Neuropharmacology 55(5)
PubMedID 18644393