

Hello Bio, Inc.
304 Wall St., Princeton, NJ 08540 USA

T. 609-683-7500
F. 609-228-4994

customercare-usa@hellobio.com



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 D₁-like dopamine receptor partial agonist (K_i values are 1 and ~ 0.5 nM at D₁-like receptors (D₁ and D₅) and ~ 150, ~ 5000 and ~ 1000 nM at D₂-like receptors (D₂, D₃ and D₄) respectively).

SKF 38393 facilitates long term potentiation (LTP) via D₁ and D₅ 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.

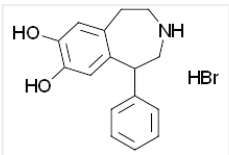
Active in vivo.

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 <i>H</i>)-3-benzazepine-7,8-diol hydrobromide
Molecular Weight	336.23
Chemical structure	 The chemical structure shows a benzazepine ring system with a phenyl group at position 1 and two hydroxyl groups at positions 7 and 8. It is shown as a hydrobromide salt. SMILES: <chem>Oc1ccc(O)c2c1NCCc3ccccc32.[Br-]</chem>
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

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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)

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Dopamine receptor pharmacology.

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

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

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