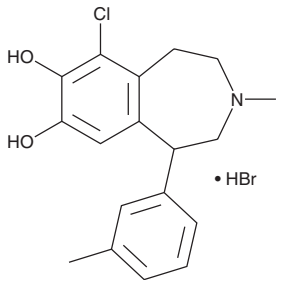
PRODUCT INFORMATION

SKF 83959 (hydrobromide)

Item No. 22220

CAS Registry No.:	67287-95-0
Formal Name:	6-chloro-2,3,4,5-tetrahydro-3-methyl-1-(3-methylphenyl)-1H-3-benzazepine-7,8-diol, monohydrobromide
MF:	$C_{18}H_{20}ClNO_2 \bullet HBr$
FW:	398.7
Purity:	≥98%
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

SKF 83959 (hydrobromide) is supplied as a crystalline solid. A stock solution may be made by dissolving the SKF 83959 (hydrobromide) in the solvent of choice, which should be purged with an inert gas. SKF 83959 (hydrobromide) is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide (DMF). The solubility of SKF 83959 (hydrobromide) in ethanol is approximately 2 mg/ml and approximately 20 mg/ml in DMSO and DMF.

SKF 83959 (hydrobromide) is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, SKF 83959 (hydrobromide) should first be dissolved in DMSO and then diluted with the aqueous buffer of choice. SKF 83959 (hydrobromide) has a solubility of approximately 0.04 mg/ml in a 1:20 solution of DMSO:PBS (pH 7.2) using this method. We do not recommend storing the aqueous solution for more than one day.

Description

SKF 83959 is a partial agonist at the dopamine D_1-like receptors (K_is = 1.18 and 7.56 nM, respectively, for D_1 and D_5) that is selective over the D_2-like receptors (K_is = 920 and 399 nM, respectively, for D_2 and D_3).[1,2] It is protective against oxidative stress in retinal ganglion cells after hydrogen peroxide-induced injury *in vitro*.[3] In a rat methylazoxymethanol acetate (MAM) model of schizophrenia, it had positive effects on hippocampal function, determined using electrophysiology, but impaired spatial learning.[4] SKF 83959 can also act as an allosteric modulator of the sigma-1 (σ_1) receptor by enhancing the binding to and delaying the dissociation of the selective σ_1-receptor agonist pentazocine.[5]

References

1. Neumeyer, J.L., Kula, N.S., Bergman, J., *et al. Eur. J. Pharmacol.* **474(2-3)**, 137-140 (2003).
2. Lee, S.-M., Kant, A., Blake, D., *et al. C. Neuropharmacology* **86**, 145-154 (2014).
3. Li, G.-Y., Li, T., Fan, B., *et al. Mol. Vis.* **18**, 2882-2895 (2012).
4. Perreault, M.L., Fan, T., Banasikowski, T.J., *et al. Eur. J. Neurosci.* (2017).
5. Guo, L., Zhao, J., Jin, G., *et al. Mol. Pharmacol.* **83(3)**, 577-586 (2013).

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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