

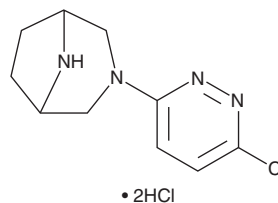
PRODUCT INFORMATION



DBO-83

Item No. 25991

CAS Registry No.: 195211-53-1
Formal Name: 3-(6-chloro-3-pyridazinyl)-3,8-diazabicyclo[3.2.1]octane, dihydrochloride
MF: C₁₀H₁₃ClN₄ • 2HCl
FW: 297.6
Purity: ≥98%
Supplied as: A 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

DBO-83 is supplied as a solid. A stock solution may be made by dissolving the DBO-83 in water. The solubility of DBO-83 in water is approximately 38 mg/ml. We do not recommend storing the aqueous solution for more than one day.

Description

DBO-83 is an agonist of nicotinic acetylcholine receptors (nAChRs) with antinociceptive and anti-amnesic activities.¹⁻³ It binds to nAChRs in rat cortical membranes with a K_i value of 4.1 nM in a radioligand binding assay with the α4β2 nAChR partial agonist and α7 nAChR agonist [³H]cytisine.¹ DBO-83 dose-dependently increases the latency to paw licking in mice in the hot plate test and reduces the number of abdominal constrictions in mice in the acetic acid abdominal constriction test, effects that can be reduced by the nAChR antagonist mecamylamine (Item No. 14602).² DBO-83 also dose-dependently prevents amnesia induced by mecamylamine, the muscarinic receptor antagonist scopolamine, and the nAChR antagonist dihydro-β-erythroidine in mice in the passive avoidance test.³

References

1. Barlocco, D., Cignarella, G., Tondi, D., *et al.* Mono- and disubstituted-3,8-diazabicyclo[3.2.1]octane derivatives as analgesics structurally related to epibatidine: Synthesis, activity, and modeling. *J. Med. Chem.* **41(5)**, 674-681 (1998).
2. Ghelardini, C., Galeotti, N., Barlocco, D., *et al.* Antinociceptive profile of the new nicotinic agonist DBO-83. *Drug Dev. Res.* **40(3)**, 251-258 (1997).
3. Ghelardini, C., Galeotti, N., Giuliani, F., *et al.* Antiamnesic activity of the nicotinic agonist DBO-83 in mice. *Drug Dev. Res.* **45(2)**, 45-51 (1998).

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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