

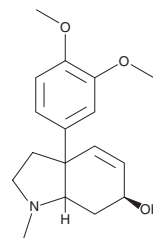
PRODUCT INFORMATION



(±)-Mesembrenol

Item No. 40470

Formal Name: (6S)-3a-(3,4-dimethoxyphenyl)-1-methyl-2,3,3a,6,7,7a-hexahydro-1H-indol-6-ol
MF: C₁₇H₂₃NO₃
FW: 289.4
Purity: ≥98%
Supplied as: A 1 mg/ml solution in ethanol
Storage: -20°C
Stability: ≥2 years
Item Origin: Synthetic



Information represents the product specifications. Batch specific analytical results are provided on each certificate of analysis.

Description

(±)-Mesembrenol is an alkaloid that has been found in *S. tortuosum* and has diverse biological activities.¹ It binds to the serotonin transporter (SERT) with a K_i value of 62 nM. (±)-Mesembrenol reduces single-shock- and theta burst-stimulated population spike amplitudes in rat hippocampal slices.² It also reduces population spike amplitudes increased by the AMPA agonist (S)-(-)-5-fluorowillardiine (Item No. 37372) when used at a concentration of 0.035 μM. (±)-Mesembrenol (10-50 μM) reduces anxiety-like behavior in zebrafish larvae in a light-dark challenge.³ As one of the major mesembrine-type alkaloids found in certain chemotypes of *S. tortuosum*, (±)-mesembrenol can be used as a marker compound in the quality control of *S. tortuosum* raw materials and finished products.⁴

References

1. Harvey, A.L., Young, L.C., Viljoen, A.M., *et al.* Pharmacological actions of the South African medicinal and functional food plant *Sceletium tortuosum* and its principal alkaloids. *J. Ethnopharmacol.* **137(3)**, 1124-1129 (2011).
2. Dimpfel, W., Franklin, R., Gericke, N., *et al.* Effect of Zembrin® and four of its alkaloid constituents on electric excitability of the rat hippocampus. *J. Ethnopharmacol.* **223**, 135-141 (2018).
3. Maphanga, V.B., Skalicka-Wozniak, K., Budzynska, B., *et al.* Mesembryanthemum tortuosum L. alkaloids modify anxiety-like behaviour in a zebrafish model. *J. Ethnopharmacol.* **290**, 115068 (2022).
4. Shikanga, E.A., Viljoen, A.M., Combrinck, S., *et al.* The chemotypic variation of *Sceletium tortuosum* alkaloids and commercial product formulations. *Biochem. Syst. Ecol.* **44**, 364-373 (2012).

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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