

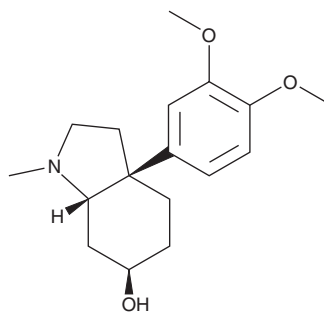
# PRODUCT INFORMATION



## Mesembranol

Item No. 40179

**CAS Registry No.:** 23544-42-5  
**Formal Name:** (3aS,6R,7aS)-3a-(3,4-dimethoxyphenyl)octahydro-1-methyl-1H-indol-6-ol  
**Synonym:** (-)-Mesembranol  
**MF:** C<sub>17</sub>H<sub>25</sub>NO<sub>3</sub>  
**FW:** 291.4  
**Purity:** ≥98%  
**Supplied as:** A solid  
**Storage:** -20°C  
**Stability:** ≥4 years  
**Item Origin:** Synthetic



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

### Laboratory Procedures

Mesembranol is supplied as a solid. A stock solution may be made by dissolving the mesembranol in the solvent of choice, which should be purged with an inert gas. Mesembranol is sparingly soluble (1-10 mg/ml) in DMSO and slightly soluble (0.1-1 mg/ml) in ethanol.

### Description

Mesembranol is an alkaloid that has been found in *S. tortuosum* and has neuroinhibitory and anxiolytic-like activities.<sup>1-4</sup> It decreases population spike amplitudes during theta burst stimulation in rat hippocampal slices when used at concentrations of 17.16 and 34.32 nM.<sup>3</sup> Mesembranol (50 μM) increases the distance traveled in the central arena in the light/dark preference test in zebrafish larvae, indicating anxiolytic-like activity.<sup>4</sup>

### References

1. Reddy, K., Stander, M.A., Stafford, G.I., *et al.* Mass spectrometry metabolomics and feature-based molecular networking reveals population-specific chemistry in some species of the *Sceletium* genus. *Front. Nutr.* **9**, 819753 (2022).
2. Jeffs, P.W., Hawks, R.L., and Farrier, D.S. Structure of the mesembranols and the absolute configuration of mesembrine and related alkaloids. *J. Am. Chem. Soc.* **91**(14), 3831-3839 (1969).
3. 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).
4. 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).

#### 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.

#### WARRANTY AND LIMITATION OF REMEDY

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