

Product Data Sheet

Product Name: Mesembrine

Cat. No.: GC48814

Chemical Properties

Cas. No. 24880-43-1

SMILES COC1=CC=C([C@]2(CCN3C)[C@]3([H])CC(CC2)=O)C=C1OC

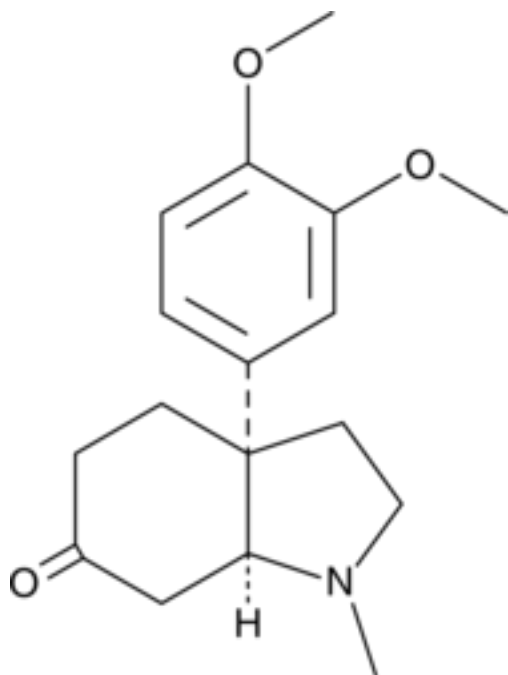
Formula C₁₇H₂₃NO₃ M.Wt 289.4

Solubility Chloroform: 10 mg/ml, Ethanol: 10 mg/ml Storage -20°C

General tips For obtaining a higher solubility, please warm the tube at 37 °C and shake it in the ultrasonic bath for a while. Stock solution can be stored below -20°C for several months.

Shipping Condition Evaluation sample solution: ship with blue ice All other available size: ship with RT, or blue ice upon request.

Structure



Background

Mesembrine is an alkaloid that has been found in *S. tortuosum* and has serotonin (5-HT) reuptake inhibitory activity.¹ It selectively binds to the 5-HT transporter (SERT; IC₅₀ = 4.3 µg/ml) over a variety

Caution: Product has not been fully validated for medical applications. For research use only.

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of receptors ($IC_{50}s = 148\text{--}750\text{ }\mu\text{g/ml}$).² Mesembrine inhibits the reuptake of 5-HT *in vitro* ($K_i = 1.4\text{ nM}$). It has analgesic effects in the hot plate test when administered at a dose of 20 mg/kg but does not induce a preference in the conditioned place preference test (CPP).^{2,3}

1.Krstenansky, J.L.Mesembrine alkaloids: Review of their occurrence, chemistry, and pharmacologyJ. Ethnopharmacol.19510-19(2017) 2.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 alkaloidsJ. Ethnopharmacol.137(3)1124-1129(2011) 3.Loria, M.J., Ali, Z., Abe, N., et al.Effects of *Sceletium tortuosum* in ratsJ. Ethnopharmacol.155(1)731-735(2014)

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