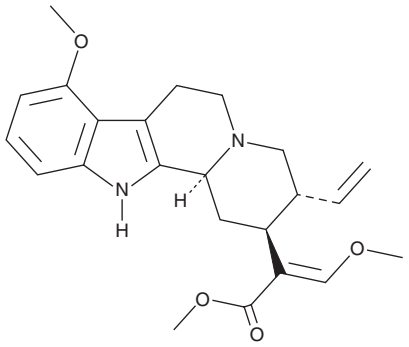
PRODUCT INFORMATION

Paynantheine

Item No. 21841



CAS Registry No.:	4697-66-9
Formal Name:	(αE,2S,3R,12bS)-3-ethenyl-1,2,3,4,6,7,12,12b-octahydro-8-methoxy-α-(methoxymethylene)-indolo[2,3-a]quinolizine-2-acetic acid, methyl ester
Synonym:	(+)-Paynantheine
MF:	$C_{23}H_{28}N_2O_4$
FW:	396.5
Purity:	≥98%
UV/Vis.:	λ_{max}: 226, 292 nm
Supplied as:	A crystalline solid
Storage:	-20°C
Stability:	≥2 years

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

Description

Paynantheine (Item No. 21841) is an analytical reference standard that is structurally similar to known opioids. Paynantheine is an alkaloid found in *M. speciosa* (Kratom in Thai).[1] It has antinociceptive activity and reduces alcohol intake in rats.[2,3] This product is intended for research and forensic applications.

References

1. Philipp, A.A., Wissenbach, D.K., Weber, A.A., *et al.* Metabolism studies of the kratom alkaloids mitraciliatine and isopaynantheine, diastereomers of the main alkaloids mitragynine and paynantheine, in rat and human urine using liquid chromatography-linear ion trap-mass spectrometry. *J. Chromatogr. B Analyt. Technol. Biomed. Life Sci.* **879(15-16)**, 1049-1055 (2011).
2. León, F., Obeng, S., Mottinelli, M., *et al.* Activity of *Mitragyna speciosa* ("Kratom") Alkaloids at Serotonin Receptors. *J. Med. Chem.* **64(18),** 13510-13523 (2021).
3. Gutridge, A.M., Robins, M.T., Cassell, R.J., *et al.* G protein-biased kratom-alkaloids and synthetic carfentanilamide opioids as potential treatments for alcohol use disorder. *Br. J. Pharmacol.* **177(7),** 1497-1513 (2019).

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