



LKT Laboratories, Inc.

Matrine

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Product Information

Product ID M0278

CAS No. 519-02-8

Chemical Name Matridin-15-one

Synonym Sophocarpidine

Formula $C_{15}H_{24}N_2O$

Formula Wt. 248.37

Melting Point 87°C

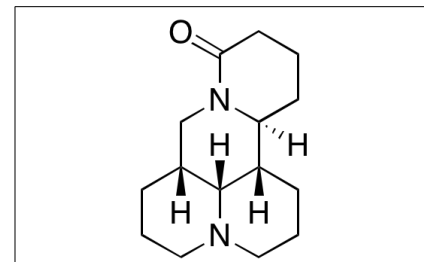
Purity ≥98%

Solubility Soluble in water, benzene, chloroform, ether, and carbon disulfide.

Store Temp 4°C

Ship Temp Ambient

Description Matrine is an alkaloid found in *Sophora* that exhibits anticancer chemotherapeutic, antinociceptive, anti-inflammatory, neuroprotective, anti-fibrotic, and antiepileptic/anticonvulsant activities. Matrine increases levels of Bax and decreases levels of Bcl-2 and VEGF-A in non-small cell lung cancer (NSCLC) and hepatoma cells, inducing apoptosis and inhibiting cell growth. Matrine also inhibits growth of hepatocellular carcinoma tumors in animal models. In animal models of chemical and thermal pain (writhing and tail flick tests), matrine decreases pain response in a κ -opioid receptor (κ OR)- and μ -opioid receptor (μ OR)-dependent manner. Additionally, matrine downregulates levels of glutamate and upregulates levels of GABA, regulating glutamate signaling and inhibiting inflammation and demyelination in animal models of experimental autoimmune encephalitis (EAE) and decreasing seizures in separate animal models. Matrine also inhibits JAK/STAT signaling, decreasing pulmonary fibrosis in vivo.



Bulk quantities available upon request

Product ID	Size
M0278	25 mg
M0278	100 mg
M0278	500 mg
M0278	1 g

References Kan QC, Zhang S, Xu YM, et al. Matrine regulates glutamate-related excitotoxic factors in experimental autoimmune encephalomyelitis. *Neurosci Lett*. 2014 Feb 7;560:92-7. PMID: 24368216.

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Ma X, Chen R, Liu X, et al. Effects of matrine on JAK-STAT signaling transduction pathways in bleomycin-induced pulmonary fibrosis. *Afr J Tradit Complement Altern Med*. 2013 Apr 12;10(3):442-8. PMID: 24146473.

Zhang Y, Zhang H, Yu P, et al. Effects of matrine against the growth of human lung cancer and hepatoma cells as well as lung cancer cell migration. *Cytotechnology*. 2009 Apr;59(3):191-200. PMID: 19649719.

Ma L, Wen S, Zhan Y, et al. Anticancer effects of the Chinese medicine matrine on murine hepatocellular carcinoma cells. *Planta Med*. 2008 Feb;74(3):245-51. PMID: 18283616.

Xiao P, Kubo H, Ohsawa M, et al. kappa-Opioid receptor-mediated antinociceptive effects of stereoisomers and derivatives of (+)-matrine in mice. *Planta Med*. 1999 Apr;65(3):230-3. PMID: 10232067.

Caution: This product is intended for laboratory and research use only. It is not for human or drug use.