



LKT Laboratories, Inc.

Jatrorrhizine Chloride

Phone: 888-558-5227
651-644-8424
Fax: 888-558-7329
Email: getinfo@lktlabs.com
Web: lktlabs.com

Product Information

Product ID J0379

CAS No. 6681-15-8

Chemical Name

Synonym

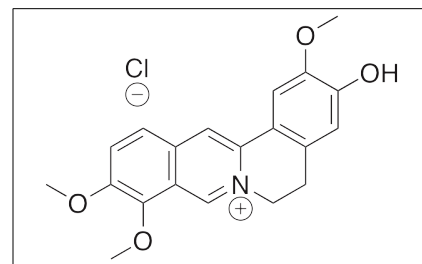
Formula $C_{20}H_{20}NO_4 Cl$

Formula Wt. 373.83

Melting Point

Purity $\geq 95\%$

Solubility Methanol (Slightly, Heated)



Bulk quantities available upon request

Product ID	Size
J0379	1 mg
J0379	5 mg

Store Temp 4°C

Ship Temp Ambient

Description Jatrorrhizine is an alkaloid compound originally found in *Corydalis* and *Coptidis* tubers that exhibits anticancer, neuroprotective, anti-parasitic, antioxidative, and gastrointestinal modulatory activities. Jatrorrhizine increases expression of p21 and p27, inducing G0/G1 phase cell cycle arrest and inhibiting proliferation in melanoma cells. In neurons, jatrorrhizine suppresses amyloid- β (A β)-induced increases in caspase 3 activation and cytochrome c release, preventing neurotoxicity. Jatrorrhizine also displays anti-parasitic benefit against *Plasmodium*, *Leishmania*, and *Trypanosoma*. In neurons, this compound inhibits H2O2-induced decreases in superoxide dismutase (SOD) and heme oxygenase 1 (HO-1) and increases in lactate dehydrogenase (LDH), malondialdehyde (MDA), and ROS. Jatrorrhizine increases gastric emptying and intestinal transit speeds in animal models of postoperative ileus. Additionally, jatrorrhizine inhibits acetylcholinesterase (AChE).

References Liu R, Cao Z, Pan Y, et al. Jatrorrhizine hydrochloride inhibits the proliferation and neovascularization of C8161 metastatic melanoma cells. *Anticancer Drugs*. 2013 Aug;24(7):667-76. PMID: 23695011.

Malebo HM, Wenzler T, Cal M, et al. Anti-protozoal activity of aporphine and protoberberine alkaloids from *Annickia kummeriae* (Engl. & Diels) Setten & Maas (Annonaceae). *BMC Complement Altern Med*. 2013 Feb 27;13:48. PMID: 23445637.

Luo T, Jiang W, Kong Y, et al. The protective effects of jatrorrhizine on β -amyloid (25-35)-induced neurotoxicity in rat cortical neurons. *CNS Neurol Disord Drug Targets*. 2012 Dec;11(8):1030-7. PMID: 23244426.

Zhang B, Cao A, Zhou J, et al. Effect of jatrorrhizine on delayed gastrointestinal transit in rat postoperative ileus. *J Pharm Pharmacol*. 2012 Mar;64(3):413-9. PMID: 22309273.

Luo T, Zhang H, Zhang WW, et al. Neuroprotective effect of Jatrorrhizine on hydrogen peroxide-induced cell injury and its potential mechanisms in PC12 cells. *Neurosci Lett*. 2011 Jul 12;498(3):227-31. PMID: 21605627.

Xiao HT, Peng J, Liang Y, et al. Acetylcholinesterase inhibitors from *Corydalis yanhusuo*. *Nat Prod Res*. 2011 Sep;25(15):1418-22. PMID: 20234973.

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