



LKT Laboratories, Inc.

Lappaconitine

Phone: 888-558-5227  
651-644-8424  
Fax: 888-558-7329  
Email: [getinfo@lktlabs.com](mailto:getinfo@lktlabs.com)  
Web: [lktlabs.com](http://lktlabs.com)

## Product Information

**Product ID** L0060

**CAS No.** 32854-75-4

**Chemical Name** (1 $\alpha$ ,14 $\alpha$ ,16 $\beta$ )-20-Ethyl-1,14,16-trimethoxyaconitane- 4,8,9-triol 4-[2-(acetylamino)-benzoate]

**Synonym** (+)-Lappaconitine

**Formula** C<sub>32</sub>H<sub>44</sub>N<sub>2</sub>O<sub>8</sub>

**Formula Wt.** 584.70

**Melting Point** 217-218 °C

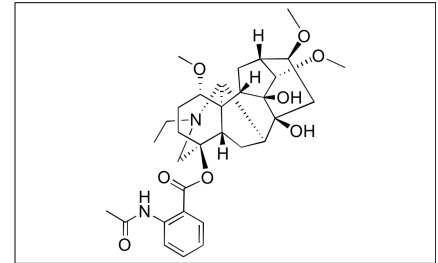
**Purity** ≥98%

**Solubility** Soluble in benzene. Slightly soluble in alcohol and ether. Practically insoluble in water.

**Store Temp** 4 °C

**Ship Temp** Ambient

**Description** Lappaconitine is an alkaloid originally found in species of *Aconitum* that exhibits analgesic, antinociceptive, anti-inflammatory, anti-arrhythmic, and antiepileptic/anticonvulsant activities. Lappaconitine increases pain threshold and downregulates expression of P2X3 receptors in dorsal root ganglion (DRG) neurons in models of chronic constrictive injury. Lappaconitine also inhibits paw and ear edema in vivo. In vitro, this compound inhibits excitability of hippocampal pyramidal cells and decreases epileptiform burst duration. Additionally, lappaconitine displays class I anti-arrhythmic activity, inducing negative inotropic activity in vivo and inhibiting human heart Na<sup>+</sup> channels by binding at neurotoxin site 2.



Product ID	Size
L0060	25 mg
L0060	100 mg
L0060	500 mg

**References** Ou S, Zhao YD, Xiao Z, et al. Effect of lappaconitine on neuropathic pain mediated by P2X3 receptor in rat dorsal root ganglion. *Neurochem Int.* 2011 Apr;58(5):564-73. PMID: 21272608.

Wang YZ, Xiao YQ, Zhang C, et al. Study of analgesic and anti-inflammatory effects of lappaconitine gelata. *J Tradit Chin Med.* 2009 Jun;29(2):141-5. PMID: 19663103.

Wright SN. Irreversible block of human heart (hH1) sodium channels by the plant alkaloid lappaconitine. *Mol Pharmacol.* 2001 Feb;59(2):183-92. PMID: 11160852.

Heubach JF, Schüle A. Cardiac effects of lappaconitine and N-deacetylappaconitine, two diterpenoid alkaloids from plants of the *Aconitum* and *Delphinium* species. *Planta Med.* 1998 Feb;64(1):22-6. PMID: 9491764.

Ameri A, Gleitz J, Peters T. Bicuculline-induced epileptiform activity in rat hippocampal slices: suppression by *Aconitum* alkaloids. *Planta Med.* 1997 Jun;63(3):228-32. PMID: 9225604.

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