



Product Information

Product ID L9610

CAS No. 2188-68-3

Chemical Name

Synonym Lycorine HCl

Formula $C_{16}H_{17}NO_4 \cdot HCl$

Formula Wt. 323.77

Melting Point

Purity $\geq 98\%$

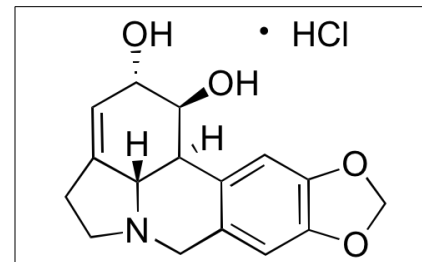
Solubility Soluble in water (>15 mg/ml), DMSO, and ethanol

Store Temp 4°C

Ship Temp Ambient

Description

Lycorine is an alkaloid found in plants in the *Amaryllidaceae* family; it exhibits antifungal, anti-parasitic, and anticancer activities. Lycorine inhibits protein synthesis by preventing amino acid incorporation into proteins, potentially through the inhibition of peptidyltransferases. Lycorine inhibits the growth of many fungi, including *Fusarium*. Additionally, lycorine induces cell cycle arrest and cell death in *Trichomonas*. This compound also induces G0/G1 phase cell cycle arrest, inhibits activity of histone deacetylases (HDACs), upregulates expression of p53 and p21, downregulates expression of cyclin D1 and CDK4, and inhibits growth in chronic myelogenous leukemia (CML) cells.



Bulk quantities available upon request

Product ID	Size
L9610	10 mg
L9610	25 mg
L9610	100 mg

References Shen JW, Ruan Y, Ren W, et al. Lycorine: a potential broad-spectrum agent against crop pathogenic fungi. *J Microbiol Biotechnol.* 2014 Mar 28;24(3):354-8. PMID: 24346469.

Li L, Dai HJ, Ye M, et al. Lycorine induces cell-cycle arrest in the G0/G1 phase in K562 cells via HDAC inhibition. *Cancer Cell Int.* 2012 Nov 23;12(1):49. PMID: 23176676.

Giordani RB, Vieira Pde B, Weizenmann M, et al. Lycorine induces cell death in the amitochondriate parasite, *Trichomonas vaginalis*, via an alternative non-apoptotic death pathway. *Phytochemistry.* 2011 May;72(7):645-50. PMID: 21324496.

Yui S, Mikami M, Mimaki Y, et al. Inhibition effect of Amaryllidaceae alkaloids, lycorine and lycoricidinol on macrophage TNF-alpha production. *Yakugaku Zasshi.* 2001 Feb;121(2):167-71. PMID: 11218731.

Kukhanova M, Victorova L, Krayevsky A. Peptidyltransferase center of ribosomes. On the mechanism of action of alkaloid lycorine. *FEBS Lett.* 1983 Aug 22;160(1-2):129-33. PMID: 6350039.

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