

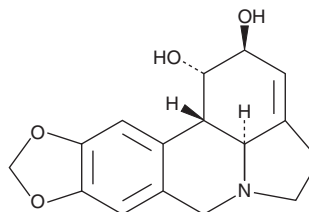
# PRODUCT INFORMATION



## Lycorine

Item No. 30650

**CAS Registry No.:** 476-28-8  
**Formal Name:** (1S,2S,12bS,12cS)-2,4,5,7,12b,12c-hexahydro-1H-[1,3]dioxolo[4,5-j]pyrrolo[3,2,1-de]phenanthridine-1,2-diol  
**Synonym:** Narcissin  
**MF:** C<sub>16</sub>H<sub>17</sub>NO<sub>4</sub>  
**FW:** 287.3  
**Purity:** ≥95%  
**Supplied as:** A crystalline solid  
**Storage:** -20°C  
**Stability:** ≥4 years  
**Item Origin:** Plant/Narcissus poeticus



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

### Laboratory Procedures

Lycorine is supplied as a crystalline solid. A stock solution may be made by dissolving the lycorine in the solvent of choice, which should be purged with an inert gas. Lycorine is soluble in the organic solvent DMSO at a concentration of approximately 1 mg/ml.

### Description

Lycorine is an alkaloid that has been found in *Amaryllidaceae* and has diverse biological activities.<sup>1-4</sup> It is active against *P. falciparum* (IC<sub>50</sub> = 1.026 µg/ml).<sup>1</sup> Lycorine inhibits severe acute respiratory syndrome coronavirus (SARS-CoV) viral infection in Vero cells (EC<sub>50</sub> = 15.7 µM).<sup>2</sup> It inhibits migration of A549 non-small cell lung cancer (NSCLC) and U373 MG glioblastoma cells when used at a concentration of 5 µM.<sup>3</sup> Lycorine (0.4 mg/kg) increases survival and reduces virus-induced paralysis in a mouse model of enterovirus 71 infection.<sup>4</sup>

### References

1. Sener, B., Orhan, I., and Satayavivad, J. Antimalarial activity screening of some alkaloids and the plant extracts from *Amaryllidaceae*. *Phytother. Res.* **17**(10), 1220-1223 (2003).
2. Li, S.-Y., Chen, C., Zhang, H.-Q., et al. Identification of natural compounds with antiviral activities against SARS-associated coronavirus. *Antiviral Res.* **67**(1), 18-23 (2005).
3. Lamoral-Theys, D., Andolfi, A., Van Goietsenoven, G., et al. Lycorine, the main phenanthridine *Amaryllidaceae* alkaloid, exhibits significant antitumor activity in cancer cells that display resistance to proapoptotic stimuli: An investigation of structure-activity relationship and mechanistic insight. *J. Med. Chem.* **52**(20), 6244-6256 (2009).
4. Liu, J., Yang, Y., Xu, Y., et al. Lycorine reduces mortality of human enterovirus 71-infected mice by inhibiting virus replication. *Virology* **8**, 483 (2011).

#### WARNING

THIS PRODUCT IS FOR RESEARCH ONLY - NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

#### SAFETY DATA

This material should be considered hazardous until further information becomes available. Do not ingest, inhale, get in eyes, on skin, or on clothing. Wash thoroughly after handling. Before use, the user must review the [complete](#) Safety Data Sheet, which has been sent via email to your institution.

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