*Natural Products*

ChemFaces

# Lycorine Datasheet

4th Edition (Revised in July, 2016)

## [ Product Information ]

**Name:** Lycorine

**Catalog No.:** CFN90263

**Cas No.:** 476-28-8


**Purity:** >=98%

**M.F:** $C_{16}H_{17}NO_4$

**M.W:** 287.31

**Physical Description:** Powder

**Synonyms:** 2-Beta-diol,3,3-alpha-didehydro-lycoran-1-alph;Amaryline;Belamarine; Galanthan-1,2-diol,3,12-didehydro-9,10-(methylenebis(oxy))-,(1-alpha,2-beta; Galanthidine;Narcissine;(-)-Lycorine.

## [ Intended Use ]

1. Reference standards;
2. Pharmacological research;
3. Synthetic precursor compounds;
4. Intermediates & Fine Chemicals;
5. Others.

## [ Source ]

The bulbus of *Lycoris radiata (L. Herit.) Herb*.

## [ Biological Activity or Inhibitors]

Lycorine, the main phenanthridine amaryllidaceae alkaloid, exhibits significant antitumor activity in cancer cells that display resistance to proapoptotic.[1]

Lycorine can suppress leukemia growth and reduce cell survival via arresting cell cycle and inducing apoptosis of tumor cells.[2]

Lycorine is a specific inhibitor of ascorbate biosynthesis in plants, and, consequently, that it can be a useful tool to bener understand the ascorbate metabolism in ascorbate synthesising organisms. [3]

Lycorine can reduce mortality of human enterovirus 71-infected mice by inhibiting virus replication.[4]

Lycorine has antiinflammatory effects.[5]

Lycorine can effectively rescue the hepatocyte from CCl(4)-induced oxidative damage without disturbing its cellular metabolic function and structural integrity, therefore, lycorine may be considered a potent antioxidant against free radical-related diseases.[6]

## [ Solvent ]

Chloroform, Dichloromethane, Ethyl Acetate, DMSO, Acetone, etc.

## [ HPLC Method ][7 ]

Mobile phase: Trifluoroacetic acid -H2O- Acetonitrile =0.01:90:10 ;

Flow rate: 1.0 ml/min;

Column temperature: 25 ℃;

The wave length of determination: 290.4 nm.

## [ Storage ]

2-8℃, Protected from air and light, refrigerate or freeze.

## [ References ]

[1]Lamoraltheys D, Andolfi A, Goietsenoven G V, *et al. J.Med. Chem., 2009, 52(20): 6244-56.*

[2] Liu J, Hu W X, He L F, *et al. Febs Lett., 2004, 578(3):245-50.*

[3] Arrigoni O, Gara L D, Paciolla C, *et al. J. Plant Physiol., 1997, 150(3):362-4.*

[4] Liu J, Yang Y, Xu Y, *et al. Virol. J., 2011, 8(1):1-9.*

[5] G. Çitoğlu, M. Tanker, B. Gümüşel, *et al. Phytother.Res., 1998, 12(3):205- 6.*

[6]Ilavenil S, Kaleeswaran B, Ravikumar S. *Fund. Clin. Pharmacol., 2012, 26(3):393-401.*

[7] Kaya G I, Polat D C, Emir A, *et al.Turkish Journal of Pharmaceutical Sciences, 2014, 11(1):107-11.*

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