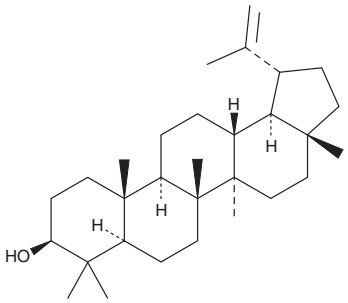
PRODUCT INFORMATION

Lupeol

Item No. 11215

CAS Registry No.:	545-47-1
Formal Name:	(3β)-lup-20(29)-en-3-ol
Synonyms:	Clerodol, Fagarasterol, Lupenol, Monogynol B, NSC 90487, β-Viscol
MF:	$C_{30}H_{50}O$
FW:	426.7
Purity:	≥98%
Supplied as:	A crystalline solid
Storage:	-20°C
Stability:	≥4 years



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

Laboratory Procedures

Lupeol is supplied as a crystalline solid. A stock solution may be made by dissolving the lupeol in the solvent of choice, which should be purged with an inert gas. Lupeol is soluble in organic solvents such as ethanol and dimethyl formamide. The solubility of lupeol in these solvents is approximately 1 and 1.6 mg/ml, respectively.

Description

Lupeol, a dietary triterpene found in certain fruits, vegetables, and medicinal plants, has potent anti-inflammatory, anticarcinogenic, antimutagenic, and antimalarial activity. It suppresses the growth of hepatocellular carcinoma cell lines SMMC7721 and HepG2 with IC_{50} values of 45 and 48.5 µM and melanoma cell lines Mel 928 and Mel 1241 with IC_{50} values of 75 and 72 µM.[1,2] At 0.76 g/kg lupeol causes a significant decrease in the blood pressure of stroke-prone hypertensive rats and reduces expression of hepatic genes involved in triglyceride and cholesterol synthesis.[3] It also has significant anti-inflammatory effects at 50 mg/kg in a carrageenan-induced edema model, inhibiting neutrophil migration.[4]

References

1. Tarapore, R.S., Siddiqui, I.A., Saleem, M., *et al.* Specific targeting of Wnt/β-catenin signaling in human melanoma cells by a dietary triterpene lupeol. *Carcinogenesis* **31(10)**, 1844-1853 (2010).
2. He, Y., Liu, F., Zhang, L., *et al.* Growth inhibition and apoptosis induced by lupeol, a dietary triterpene, in human hepatocellular carcinoma cells. *Bio. Pharm. Bull.* **34(4)**, 517-522 (2011).
3. Ardiansyah, Yamaguchi, E., Shirakawa, H., *et al.* Lupeol supplementation improves blood pressure and lipid metabolism parameters in stroke-prone spontaneously hypertensive rats. *Biosci. Biotechnol. Biochem.* **76(1)**, 183-185 (2012).
4. Lucetti, D.L., Lucetti, E.C., Bandeira, M.A., *et al.* Anti-inflammatory effects and possible mechanism of action of lupeol acetate isolated from *Himatanthus drasticus* (Mart.) *Plumel. J. Inflamm. (Lond.)* **7(60)**, 1-11 (2010).

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