

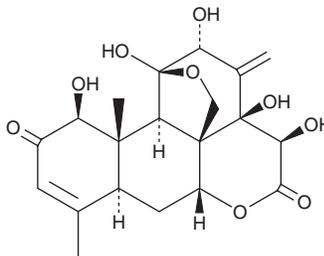
# PRODUCT INFORMATION



## Eurycomanone

Item No. 30896

**CAS Registry No.:** 84633-29-4  
**Formal Name:** (1 $\beta$ ,11 $\beta$ ,12 $\alpha$ ,15 $\beta$ )-11,20-epoxy-1,11,12,14,15-pentahydroxy-picrasa-3,13(21)-diene-2,16-dione  
**Synonyms:** NSC 339187, Pasakbumin A  
**MF:** C<sub>20</sub>H<sub>24</sub>O<sub>9</sub>  
**FW:** 408.4  
**Purity:**  $\geq$ 95%  
**Supplied as:** A solid  
**Storage:** -20°C  
**Stability:**  $\geq$ 4 years  
**Item Origin:** Plant/Tongkat Ali



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

### Laboratory Procedures

Eurycomanone is supplied as a solid. A stock solution may be made by dissolving the eurycomanone in the solvent of choice, which should be purged with an inert gas. Eurycomanone is slightly soluble in DMSO.

### Description

Eurycomanone is a quassinoid originally isolated from *E. longifolia* that has diverse biological activities.<sup>1</sup> It is active against the W2 and D6 clones of *P. falciparum* (IC<sub>50</sub>s = 0.015 and 0.026  $\mu$ g/ml, respectively).<sup>2</sup> Eurycomanone induces lipolysis in 3T3-L1 adipocytes with an EC<sub>50</sub> value of 14.6  $\mu$ M, an effect that can be blocked by the protein kinase A (PKA) inhibitor H-89 (Item No. 10010556).<sup>3</sup> It induces cell cycle arrest at the G<sub>2</sub>/M phase and apoptosis in HepG2 cells when used at a concentration of 5  $\mu$ g/ml.<sup>4</sup> It reduces estrogen release and increases testosterone release in isolated rat Leydig cell-rich testicular interstitial cell preparations when used at concentrations of 1 and 10  $\mu$ M.<sup>5</sup> Eurycomanone (1 mg/kg, i.p.) decreases gastric acid secretion and lesion size in rat models of indomethacin-, water immersion stress-, or pyloric ligation-induced ulcer formation.<sup>6</sup>

### References

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3. Lahrita, L., Hirosawa, R., Kato, E., *et al.* Isolation and lipolytic activity of eurycomanone and its epoxy derivative from *Eurycoma longifolia*. *Bioorg. Med. Chem.* **25**(17), 4829-4834 (2017).
4. Zakaria, Y., Rahmat, A., Pihie, A.H.L., *et al.* Eurycomanone induce apoptosis in HepG2 cells via up-regulation of p53. *Cancer Cell Int.* **9**, (2009).
5. Low, B.-S., Choi, S.-B., Wahab, H.A., *et al.* Eurycomanone, the major quassinoid in *Eurycoma longifolia* root extract increases spermatogenesis by inhibiting the activity of phosphodiesterase and aromatase in steroidogenesis. *J. Ethnopharmacol.* **149**(1), 201-207 (2013).
6. Tada, H., Yasuda, F., Otani, K., *et al.* New antiulcer quassinoids from *Eurycoma longifolia*. *Eur. J. Med. Chem.* **26**(3), 345-349 (1991).

#### 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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