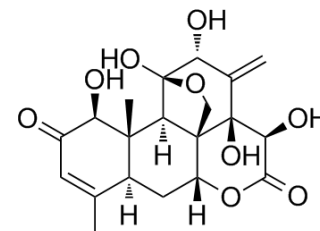


## Eurycomanone

Cat. No.:	HY-N5012		
CAS No.:	84633-29-4		
Molecular Formula:	C <sub>20</sub> H <sub>24</sub> O <sub>9</sub>		
Molecular Weight:	408.4		
Target:	Others		
Pathway:	Others		
Storage:	Powder	-20°C	3 years
		4°C	2 years
	In solvent	-80°C	6 months
		-20°C	1 month



### BIOLOGICAL ACTIVITY

Description	Eurycomanone could increase spermatogenesis by inhibiting the activity of phosphodiesterase and aromatase in steroidogenesis.
In Vitro	Eurycomanone (EN) significantly increased testosterone production dose-dependently at 0.1, 1.0 and 10.0 μM, but the two lower doses when combined with 3-isobutyl-1-methylxanthine (IBMX), the phosphodiesterase inhibitor were not significantly higher than EN or IBMX alone, except at a higher concentration. The molecular docking studies indicated EN and IBMX were binding at different sites of the enzyme. EN has no reversal of inhibition by aminoglutethimide, ketoconazole or nifedipine at the respective steroid oogenesis enzyme. The quassinoid was also non-responsive to the inhibition of oestrogen receptor by tamoxifen, but displayed improved mestane inhibition of aromatase in reducing oestrogen production. The molecular docking studies further supported that EN and formestane bound to aromatase with similar orientations and free energy binding values <sup>[1]</sup> .

### REFERENCES

[1]. Low BS, 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.* 2013 Aug 26;149(1):201-7.

**Caution: Product has not been fully validated for medical applications. For research use only.**

Tel: 609-228-6898

Fax: 609-228-5909

E-mail: tech@MedChemExpress.com

Address: 1 Deer Park Dr, Suite Q, Monmouth Junction, NJ 08852, USA