

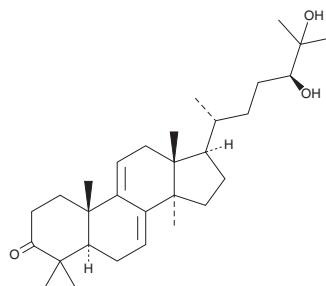
# PRODUCT INFORMATION



## Ganodermanondiol

Item No. 39776

**CAS Registry No.:** 107900-76-5  
**Formal Name:** 24S,25-dihydroxy-lanosta-7,9(11)-dien-3-one  
**MF:** C<sub>30</sub>H<sub>48</sub>O<sub>3</sub>  
**FW:** 456.7  
**Purity:** ≥98%  
**Supplied as:** A solid  
**Storage:** -20°C  
**Stability:** ≥4 years  
**Item Origin:** Fungus/*Ganoderma* sp.



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

### Laboratory Procedures

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

### Description

Ganodermanondiol is a triterpenoid that has been found in *G. lucidum* and has diverse biological activities.<sup>1-5</sup> It inhibits the proliferation of Meth A sarcoma and LLC1 lung carcinoma cells (IC<sub>50</sub>s = 3.4 and 12.5 µg/ml, respectively).<sup>2</sup> Ganodermanondiol (20 µM) reduces the viability of RAW 264.7 macrophages.<sup>3</sup> It inhibits superoxide generation in, and elastase release from, isolated human neutrophils induced by N-formyl-Met-Leu-Phe (fMLF; Item No. 21495) and cytochalasin B (Item No. 11328) with IC<sub>50</sub> values of 6.36 and 5.01 µg/ml, respectively.<sup>4</sup> Ganodermanondiol inhibits complement-dependent hemolysis of isolated sheep red blood cells (IC<sub>50</sub> = 41.7 µM).<sup>5</sup>

### References

1. Akihisa, T., Nakamura, Y., Tagata, M., *et al.* Anti-inflammatory and anti-tumor-promoting effects of triterpene acids and sterols from the fungus *Ganoderma lucidum*. *Chem. Biodivers.* **4**(2), 224-231 (2007).
2. Min, B.S., Gao, J.J., Nakamura, N., *et al.* Triterpenes from the spores of *Ganoderma lucidum* and their cytotoxicity against meth-A and LLC tumor cells. *Chem. Pharm. Bull. (Tokyo)* **48**(7), 1026-1033 (2000).
3. Choi, S., Nguyen, V.T., Tae, N., *et al.* Anti-inflammatory and heme oxygenase-1 inducing activities of lanostane triterpenes isolated from mushroom *Ganoderma lucidum* in RAW264.7 cells. *Toxicol. Appl. Pharmacol.* **280**(3), 434-442 (2014).
4. Thang, T.D., Kuo, P.-C., Hwang, T.-L., *et al.* Triterpenoids and steroids from *Ganoderma mastoporum* and their inhibitory effects on superoxide anion generation and elastase release. *Molecules* **18**(11), 14285-14292 (2013).
5. Min, B.S., Gao, J.J., Hattori, M., *et al.* Anticomplement activity of terpenoids from the spores of *Ganoderma lucidum*. *Planta Med.* **67**(9), 811-814 (2001).

#### 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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