

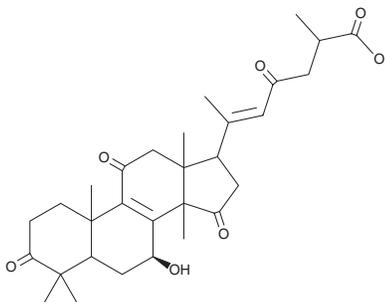
# PRODUCT INFORMATION



## Ganoderenic Acid D

Item No. 39774

**CAS Registry No.:** 100665-43-8  
**Formal Name:** (7 $\beta$ ,20E)-7-hydroxy-3,11,15,23-tetraoxo-lanosta-8,20(22)-dien-26-oic acid  
**MF:** C<sub>30</sub>H<sub>40</sub>O<sub>7</sub>  
**FW:** 512.6  
**Purity:**  $\geq$ 98%  
**Supplied as:** A solid  
**Storage:** -20°C  
**Stability:**  $\geq$ 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

Ganoderenic acid D is supplied as a solid. A stock solution may be made by dissolving the ganoderenic acid D in the solvent of choice, which should be purged with an inert gas. Ganoderenic acid D is soluble in methanol and acetonitrile.

### Description

Ganoderenic acid D is a triterpenoid originally isolated from *G. lucidum* and has diverse biological activities.<sup>1-4</sup> It inhibits angiotensin-converting enzyme (ACE; IC<sub>50</sub> = 734  $\mu$ M).<sup>2</sup> Ganoderenic acid D is cytotoxic to HepG2 liver, HeLa cervical, and Caco-2 colon cancer cells (IC<sub>50</sub>s = 0.14, 0.18, and 0.26 mg/ml, respectively).<sup>3</sup> It inhibits LPS-induced nitric oxide (NO) production in BV-2 microglia (IC<sub>50</sub> = 13.77  $\mu$ M).<sup>4</sup>

### References

1. Komoda, Y., Nakamura, H., Ishihara, S., *et al.* Structures of new terpenoid constituents of *Ganoderma lucidum* (Fr.) KARST (Polyporaceae). *Chem. Pharm. Bull.* **33(11)**, 4829-4835 (1985).
2. Hai-Bang, T. and Shimizu, K. Structure-activity relationship and inhibition pattern of reishi-derived (*Ganoderma lingzhi*) triterpenoids against angiotensin-converting enzyme. *Phytochem. Lett.* **12**, 243-247 (2015).
3. Ruan, W., Lim, A.H.H., Huang, L.G., *et al.* Extraction optimisation and isolation of triterpenoids from *Ganoderma lucidum* and their effect on human carcinoma cell growth. *Nat. Prod. Res.* **28(24)**, 2264-2272 (2014).
4. Jiao, Y., Xie, T., Zou, L.-H., *et al.* Lanostane triterpenoids from *Ganoderma curtisii* and their NO production inhibitory activities of LPS-induced microglia. *Bioorg. Med. Chem. Lett.* **26(15)**, 3556-3561 (2016).

#### 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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