# PRODUCT INFORMATION



# Ganoderiol F

Item No. 39775

CAS Registry No.: 114567-47-4

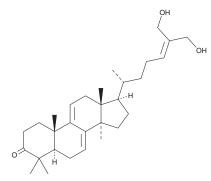
Formal Name: 26,27-dihydroxy-lanosta-

7,9(11),24-trien-3-one

MF:  $C_{30}H_{46}O_{3}$ FW: 454.7 **Purity:** ≥98% A solid Supplied as: Storage: -20°C Stability: ≥4 years

Fungus/Ganoderma sp. Item Origin:

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



## **Laboratory Procedures**

Ganoderiol F is supplied as a solid. A stock solution may be made by dissolving the ganoderiol F in the solvent of choice, which should be purged with an inert gas. Ganoderiol F is soluble in organic solvents such as acetone, chloroform, dichloromethane, DMSO, and ethyl acetate.

## Description

Ganoderiol F is a triterpenoid that has been found in G. lucidum and has diverse biological activities. 1-4 It reduces LPS-induced nitric oxide (NO) production and increases heme oxygenase-1 (HO-1) levels in RAW 264.7 cells when used at a concentration of 50 μM.1 Ganoderiol F is a farnesoid X receptor (FXR) agonist, inducing reporter gene expression in HEK293 cells expressing the recombinant human receptor (EC<sub>50</sub> = 5  $\mu$ M).<sup>2</sup> It inhibits complement-dependent hemolysis of isolated sheep red blood cells (IC<sub>50</sub> = 48  $\mu$ M).<sup>3</sup> Ganoderiol F also reduces HIV-1 viral proliferation in MT-4 cells (IC<sub>50</sub> = 7.8  $\mu$ g/ml).<sup>4</sup>

#### References

- 1. 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).
- 2. Grienke, U., Mihály-Bison, J., Schuster, D., et al. Pharmacophore-based discovery of FXR-agonists. Part II: Identification of bioactive triterpenes from Ganoderma lucidum. Bioorg. Med. Chem. 19(22), 6779-6791 (2011).
- 3. 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).
- 4. El-Mekkawy, S., Meselhy, M.R., Nakamura, N., et al. Anti-HIV-1 and anti-HIV-1-protease substances from Ganoderma lucidum. Phytochemistry 49(6), 1651-1657 (1998).

WARNING
THIS PRODUCT IS FOR RESEARCH ONLY - NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

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.

## WARRANTY AND LIMITATION OF REMEDY

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