# **PRODUCT** INFORMATION



Ganoderic Acid C1

Item No. 33212

CAS Registry No.:	95311-97-0	
Formal Name:	(7β,25R)-7-hydroxy-3,11,15,23-	``
	tetraoxo-lanost-8-en-26-oic acid	
MF:	C <sub>30</sub> H <sub>42</sub> O <sub>7</sub>	0 H 0
FW:	514.7	_ / Он
Purity:	≥98%	
UV/Vis.:	λ <sub>max</sub> : 253 nm	
Supplied as:	A crystalline solid	
Storage:	-20°C	ОЧ
Stability:	≥4 years	
Item Origin:	Fungus/Ganoderma lucidum	

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

# Laboratory Procedures

Ganoderic acid C1 is supplied as a crystalline solid. A stock solution may be made by dissolving the ganoderic acid C1 in the solvent of choice, which should be purged with an inert gas. Ganoderic acid C1 is soluble in DMSO.

# Description

Ganoderic acid C1 is a triterpenoid that has been found in G. lucidum and has diverse biological activities.<sup>1-4</sup> It inhibits angiotensin-converting enzyme (ACE; IC<sub>50</sub> = 745  $\mu$ M).<sup>4</sup> Ganoderic acid C1 also inhibits HIV-1 protease with an IC<sub>50</sub> value of 180  $\mu$ M.<sup>1</sup> It reduces the proliferation of murine Lewis lung carcinoma cells but not murine Meth-A sarcoma cells (EC<sub>50</sub>s = 17 and >20  $\mu$ g/ml, respectively).<sup>2</sup> Ganoderic acid C1 (20  $\mu$ g/ml) inhibits LPS-induced NF- $\kappa$ B phosphorylation and production of TNF- $\alpha$  in RAW 264.7 cells, as well as in peripheral blood mononuclear cells (PBMCs) isolated from patients with asthma.<sup>3</sup>

# References

- 1. 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).
- 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).
- Liu, C., Yang, N., Song, Y., et al. Ganoderic acid C1 isolated from the anti-asthma formula, ASHMI™ 3. suppresses TNF-a production by mouse macrophages and peripheral blood mononuclear cells from asthma patients. Int. Immunopharmacol. 27(2), 224-231 (2015).
- 4. 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).

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

## SAFFTY 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.

# WARRANTY AND LIMITATION OF REMEDY

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