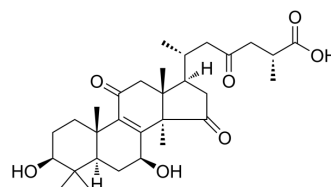


Ganoderic acid B

Cat. No.:	HY-N2006
CAS No.:	81907-61-1
Molecular Formula:	C ₃₀ H ₄₄ O ₇
Molecular Weight:	516.67
Target:	HIV Protease; EBV
Pathway:	Anti-infection; Metabolic Enzyme/Protease
Storage:	4°C, protect from light * In solvent : -80°C, 6 months; -20°C, 1 month (protect from light)



SOLVENT & SOLUBILITY

In Vitro

DMSO : 50 mg/mL (96.77 mM; Need ultrasonic)

Concentration	Mass			
	1 mg	5 mg	10 mg	
1 mM	1.9355 mL	9.6774 mL	19.3547 mL	
5 mM	0.3871 mL	1.9355 mL	3.8709 mL	
10 mM	0.1935 mL	0.9677 mL	1.9355 mL	

Please refer to the solubility information to select the appropriate solvent.

BIOLOGICAL ACTIVITY

Description

Ganoderic acid B is a triterpene isolated from a mushroom *Ganoderma lucidum*. Ganoderic acid B inhibits the activation of Epstein-Barr virus (EBV) antigens as telomerase inhibitor. Ganoderic acid B is a moderately active inhibitor against HIV-1 protease (IC₅₀: 170 μM)^{[1][2][3]}.

IC₅₀ & Target

HIV-1 protease^[3]

In Vitro

Ganoderic acid B (0-40 μM, 1 h) reduces TNF-α, IL-6 and IL-1β levels in cellular supernatant in LPS-induced A549 cells^[4]. MCE has not independently confirmed the accuracy of these methods. They are for reference only.

In Vivo

Ganoderic acid B (3 or 6 mg/kg, i.p.) protects mice from LPS-induced pneumonia^[4].
Ganoderic acid B (5 mg/kg, s.c.) shows antinociceptive effects in acetic acid-induced writhing in mice^[5].
MCE has not independently confirmed the accuracy of these methods. They are for reference only.

Animal Model: LPS-induced pneumonia mice^[4]

Dosage: 3 or 6 mg/kg

Administration:	i.p.
Result:	Reduced Lung dry/wet weight (W/D) and myeloperoxidase activity in lung. Increased SOD, decreased MDA, TNF- α , IL-1 β and IL-6 level.

REFERENCES

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- [2]. Koyama K, et al. Antinociceptive components of *Ganoderma lucidum*. *Planta Med.* 1997 Jun;63(3):224-7.
- [3]. Zhou S, et al. Triterpenes and Soluble Polysaccharide Changes in Lingzhi or Reishi Medicinal Mushroom, *Ganoderma lucidum* (Agaricomycetes), During Fruiting Growth. *Int J Med Mushrooms.* 2018;20(9):859-871.
- [4]. Zheng DS, et al. Triterpenoids from *Ganoderma lucidum* inhibit the activation of EBV antigens as telomerase inhibitors. *Exp Ther Med.* 2017 Oct;14(4):3273-3278.
- [5]. el-Mekkawy S, et al. Anti-HIV-1 and anti-HIV-1-protease substances from *Ganoderma lucidum*. *Phytochemistry.* 1998 Nov;49(6):1651-7.

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

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