

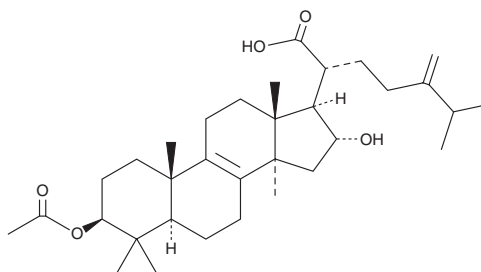
PRODUCT INFORMATION



Pachymic Acid

Item No. 33180

CAS Registry No.: 29070-92-6
Formal Name: 3 β -(acetyloxy)-16 α -hydroxy-24-methylene-lanost-8-en-21-oic acid
Synonyms: 3-O-Acetyltumulolic Acid, NSC 244427
MF: C₃₃H₅₂O₅
FW: 528.8
Purity: \geq 98%
Supplied as: A solid
Storage: -20°C
Stability: \geq 4 years
Item Origin: Fungus/*Poria cocos*



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

Laboratory Procedures

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

Description

Pachymic acid is a triterpenoid that has been found in *P. cocos* and has diverse biological activities.¹⁻⁴ It inhibits hexokinase 2 (HK2; IC₅₀ = 5.01 μ M), as well as reduces glucose uptake and lactate production in SK-BR-3 breast cancer cells.¹ Pachymic acid inhibits IL-1 β -induced cytosolic phospholipase A₂ (cPLA₂) activation and prostaglandin E₂ (PGE₂; Item No. 14010) production in, as well as inhibits the proliferation of, A549 lung cancer cells.² It decreases tumor growth in an NCI H23 lung cancer mouse xenograft model when administered at doses of 30 and 60 mg/kg.² Pachymic acid (10 and 20 mg/kg) prevents increases in serum urea and creatinine levels in a mouse model of renal ischemia-reperfusion injury.⁴

References

1. Miao, G., Han, J., Zhang, J., *et al.* Targeting pyruvate kinase M2 and hexokinase II, pachymic acid impairs glucose metabolism and induces mitochondrial apoptosis. *Biol. Pharm. Bull.* **42(1)**, 123-129 (2019).
2. Ling, H., Jia, X., Zhang, Y., *et al.* Pachymic acid inhibits cell growth and modulates arachidonic acid metabolism in nonsmall cell lung cancer A549 cells. *Mol. Carcinog.* **49(3)**, 271-282 (2010).
3. Ma, J., Liu, J., Lu, C., *et al.* Pachymic acid induces apoptosis via activating ROS-dependent JNK and ER stress pathways in lung cancer cells. *Cancer Cell Int.* **15**, 78 (2015).
4. Jiang, G.-P., Liao, Y.-J., Huang, L.-L., *et al.* Effects and molecular mechanism of pachymic acid on ferroptosis in renal ischemia reperfusion injury. *Mol. Med. Rep.* **23(1)**, 1 (2021).

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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