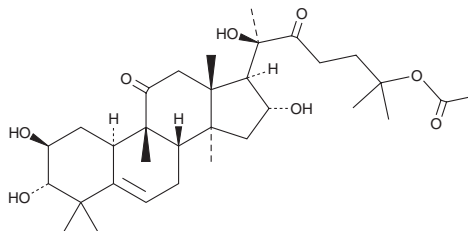


PRODUCT INFORMATION



Cucurbitacin II_a Item No. 37371

CAS Registry No.: 58546-34-2
Formal Name: (2β,3α,9β,10α,16α)-25-(acetyloxy)-2,3,16,20-tetrahydroxy-9-methyl-19-norlanost-5-ene-11,22-dione
Synonyms: Dihydrocucurbitacin Q1, Hemslecina A
MF: C₃₂H₅₀O₈
FW: 562.7
Purity: ≥98%
Supplied as: A solid
Storage: -20°C
Stability: ≥4 years
Item Origin: Plant/*Hemsleya amabilis* Diels



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

Laboratory Procedures

Cucurbitacin II_a is supplied as a solid. A stock solution may be made by dissolving the cucurbitacin II_a in the solvent of choice, which should be purged with an inert gas. Cucurbitacin II_a is soluble in methanol and DMSO.

Description

Cucurbitacin II_a is a triterpenoid that has been found in *H. amabilis* and has diverse biological activities.¹⁻³ It decreases the proliferation of (IC₅₀ = 370 nM), and induces cell cycle arrest at the G₂/M phase and apoptosis in, HT-29 colorectal adenocarcinoma cells when used at a concentration of 1 μM.¹ Cucurbitacin II_a (2.5 μM) induces cell cycle arrest at the G₀/G₁ phase in LPS-stimulated, but not unstimulated, RAW 264.7 macrophages.² *In vivo*, cucurbitacin II_a (5 mg/kg) decreases immobility time in the forced swim test and the tail suspension test in a mouse model of intermittent unpredictable stress.³

References

1. Wang, W., Yang, H., Li, Y., *et al.* Identification of 16,25- O-diacetyl-cucurbitane F and 25- O-acetyl-23,24-dihydrocucurbitacin F as novel anti-cancer chemicals. *R. Soc. Open Sci.* **5(8)**, 180723 (2018).
2. He, J., Wang, Y., Xu, L.H., *et al.* Cucurbitacin II_a induces caspase-3-dependent apoptosis and enhances autophagy in lipopolysaccharide-stimulated RAW 264.7 macrophages. *Int. Immunopharmacol.* **16(1)**, 27-34 (2013).
3. Zhou, S.M., Guan, S.Y., Yang, L., *et al.* Cucurbitacin II_a exerts antidepressant-like effects on mice exposed to chronic unpredictable mild stress. *Neuroreport* **28(5)**, 259-267 (2017).

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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