

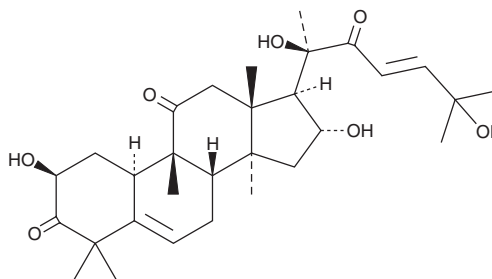
PRODUCT INFORMATION



Cucurbitacin D

Item No. 36172

CAS Registry No.: 3877-86-9
Formal Name: (2 β ,9 β ,10 α ,16 α ,23E)-2,16,20,25-tetrahydroxy-9-methyl-19-norlanosta-5,23-diene-3,11,22-trione
Synonyms: (+)-Cucurbitacin D, Elatericin A, NSC 308606, NSC 521776
MF: C₃₀H₄₄O₇
FW: 516.7
Purity: \geq 98%
Supplied as: A solid
Storage: -20°C
Stability: \geq 4 years
Item Origin: Plant/*Hemsleya amabilis*



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

Laboratory Procedures

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

Description

Cucurbitacin D is a triterpenoid that has been found in *Cucurbita texana* and has diverse biological activities.¹⁻³ It decreases levels of the heat shock protein 90 (Hsp90) client proteins HER2, Raf, and cyclin-dependent kinase 6 (Cdk6) in MCF-7 breast cancer cell lysates in a concentration-dependent manner and inhibits the proliferation of MCF-7 cells (IC₅₀ = 0.598 μ M).¹ Cucurbitacin D (0.1 μ M) inhibits cigarette smoke condensate-induced HIV-1 replication in chronically HIV-1-infected U1 macrophages.² *In vivo*, cucurbitacin D (0.025 mg/kg) decreases cold and mechanical allodynia in a mouse model of neuropathic pain induced by paclitaxel (Item No. 10461).³

References

1. Hall, J.A., Seedarala, S., Rice, N., *et al.* Cucurbitacin D Is a disruptor of the HSP90 chaperone machinery. *J. Nat. Prod.* **78**(4), 873-879 (2015).
2. Kodidela, S., Sinha, N., Kumar, A., *et al.* Anti-HIV activity of cucurbitacin-D against cigarette smoke condensate-induced HIV replication in the U1 macrophages. *Viruses* **13**(6), 1004 (2021).
3. Lee, J.H., Kim, B., Ko, S.-G., *et al.* Analgesic effect of SH003 and *Trichosanthes kirilowii* Maximowicz in paclitaxel-induced neuropathic pain in mice. *Curr. Issues Mol. Biol.* **44**(2), 718-730 (2022).

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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