

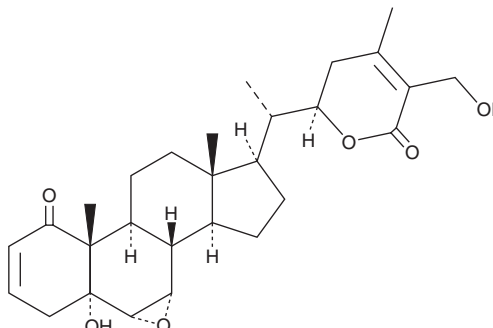
PRODUCT INFORMATION



12-Deoxywithastramonolide

Item No. 11669

CAS Registry No.: 60124-17-6
Formal Name: 6 α ,7 α -epoxy-5 α ,22R,27-trihydroxy-1-oxo-ergosta-2,24-dien-26-oic acid δ -lactone
Synonyms: Baimantuoluoside C aglycone, 27-Hydroxywithanolide B
MF: C₂₈H₃₈O₆
FW: 470.6
Purity: \geq 98%
UV/Vis.: λ_{max} : 224 nm
Supplied as: A crystalline solid
Storage: -20°C
Stability: \geq 2 years



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

Laboratory Procedures

12-Deoxywithastramonolide is supplied as a crystalline solid. A stock solution may be made by dissolving the 12-deoxywithastramonolide in the solvent of choice. 12-Deoxywithastramonolide is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide, which should be purged with an inert gas. The solubility of 12-deoxywithastramonolide in these solvents is approximately 20, 0.1, and 2 mg/ml, respectively.

12-Deoxywithastramonolide is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, 12-deoxywithastramonolide should first be dissolved in ethanol and then diluted with the aqueous buffer of choice. 12-Deoxywithastramonolide has a solubility of approximately 0.3 mg/ml in a 1:2 solution of ethanol:PBS (pH 7.2) using this method. We do not recommend storing the aqueous solution for more than one day.

Description

12-Deoxywithastramonolide is a withanolide found in *W. somnifera* roots.¹ It has anti-inflammatory activity, reducing Tnf- α and increasing Il-10 production in mice following oral administration at doses ranging from 50-200 mg/kg. 12-Deoxywithastramonolide also reduces the growth of A549 lung and HT-29 colorectal cancer cells (IC₅₀s = 47.1 and 29.8 μ M, respectively).²

References

1. Srivastava, P., Maurya, U.S., Pal, A., *et al.* Enrichment of aglycone fractions with immunomodulatory potential: Stability and pharmacokinetic of *Withania* bioactives. *Food Res. Int.* **54(1)**, 867-872 (2013).
2. Rao, P.C., Begum, S., Jahromi, M.A., *et al.* Cytotoxicity of withasteroids: Withametelin induces cell cycle arrest at G2/M phase and mitochondria-mediated apoptosis in non-small cell lung cancer A549 cells. *Tumour Biol.* **37(9)**, 12579-12587 (2016).

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.

WARRANTY AND LIMITATION OF REMEDY

Buyer agrees to purchase the material subject to Cayman's Terms and Conditions. Complete Terms and Conditions including Warranty and Limitation of Liability information can be found on our website.

Copyright Cayman Chemical Company, 01/22/2018

CAYMAN CHEMICAL

1180 EAST ELLSWORTH RD
ANN ARBOR, MI 48108 · USA

PHONE: [800] 364-9897

[734] 971-3335

FAX: [734] 971-3640

CUSTSERV@CAYMANCHEM.COM
WWW.CAYMANCHEM.COM