Withanolide A
Item No. 11797

CAS Registry No.: 32911-62-9
Formal Name: 6α,7α-epoxy-5α,20.22R-trihydroxy-1-oxo-ergosta-2,24-dien-26-oic acid δ-lactone
Synonyms: Withanol, WL-A
MF: C28H38O6
FW: 470.6
Purity: ≥95%
Stability: ≥2 years at -20°C
Supplied as: A crystalline solid
UV/Vis.: λ_max: 226 nm

Laboratory Procedures
For long term storage, we suggest that withanolide A be stored as supplied at -20°C. It should be stable for at least two years.

Withanolide A is supplied as a crystalline solid. A stock solution may be made by dissolving the withanolide A in the solvent of choice. Withanolide A is soluble in organic solvents such as methanol and acetonitrile, which should be purged with an inert gas. The solubility of withanolide A in these solvents is approximately 0.5 and 0.1 mg/ml, respectively.

Withanolide A is sparingly soluble in aqueous solutions. To enhance aqueous solubility, dilute the organic solvent solution into aqueous buffers or isotonic saline. If performing biological experiments, ensure the residual amount of organic solvent is insignificant, since organic solvents may have physiological effects at low concentrations. We do not recommend storing the aqueous solution for more than one day.

Withanolide A is a natural product isolated from the medicinal plant W. somnifera that has antioxidant and neuroprotective activity.1 It helps to promote neurite outgrowth at 1 µM in cultured neurons and in rodents injected with Aβ(25-35), and also recovers Aβ(25-35)-induced memory deficit in mice (10 µmol/kg/day).2,3 Withanolide A reverses hypoxia-mediated neurodegeneration by restoring hypoxia-induced glutathione depletion in the hippocampus of mice.4

References

Related Products
For a list of related products please visit: www.caymanchem.com/catalog/11797

WARNING: THIS PRODUCT IS FOR LABORATORY RESEARCH ONLY; NOT FOR ADMINISTRATION TO HUMANS. NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

SAFETY DATA
This material should be considered hazardous until information to the contrary becomes available. Do not ingest, swallow, or inhale. Do not get in eyes, on skin, or on clothing. Wash thoroughly after handling. This information contains some, but not all, of the information required for the safe and proper use of this material. 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
Cayman Chemical Company makes no warranty or guarantee of any kind, whether written or oral, expressed or implied, including without limitation, any warranty of fitness for a particular purpose, suitability and merchantability, which extends beyond the description of the chemicals themselves. Cayman warrants only to the original customer that the material will meet our specifications at the time of delivery.

Cayman will not accept the delivery obligations with due care and skill. Thus, in no event will Cayman have any obligation or liability, whether in tort (including negligence) or in contract, for any direct, indirect, incidental or consequential damages, even if Cayman is informed about their possible existence.

This limitation of liability does not apply in the case of intentional acts or negligence of Cayman, its directors or its employees.

Buyer's exclusive remedy and Cayman's sole liability hereunder shall be limited to a refund of the purchase price, or at Cayman's option, the replacement, at no cost to Buyer, of all material that does not meet our specifications.

For further details, please refer to our Warranty and Limitation of Remedy located on our website and in our catalog.