

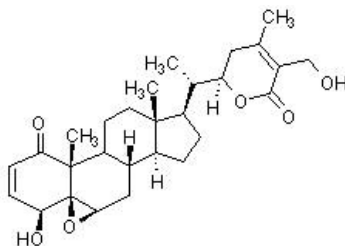
Product datasheet

Withaferin A from *Withania somnifera* ab120644

1 References 2 Images

Overview

Product name	Withaferin A from <i>Withania somnifera</i>
Description	Naturally occurring withanolide/steroidal lactone with anticancer properties
Biological description	Naturally occurring withanolide/steroidal lactone with anticancer properties. Demonstrates a number of cellular effects including the covalent binding to annexin II, inhibition of chymotrypsin-like activity, PKC and caspase 3. Causes translocation of cytochrome C to the nucleus and the cleavage of PLC- γ 1. Down-regulates Notch 1, 3, cdc25C, phosphorylated Akt and bcl-2 proteins.
Purity	> 98%
CAS Number	5119-48-2
Chemical structure	



Properties

Chemical name	(4 β ,5 β ,6 β ,22R)-5,6-Epoxy-4,22,27-trihydroxy-1-oxoergosta-2,24-dien-26-oic acid δ -lactone
Molecular weight	470.60
Molecular formula	C ₂₈ H ₃₈ O ₆
Storage instructions	Store at -20°C. Store under desiccating conditions. The product can be stored for up to 12 months.
Solubility overview	Soluble in ethanol
Handling	<p>Wherever possible, you should prepare and use solutions on the same day. However, if you need to make up stock solutions in advance, we recommend that you store the solution as aliquots in tightly sealed vials at -20°C. Generally, these will be useable for up to one month. Before use, and prior to opening the vial we recommend that you allow your product to equilibrate to room temperature for at least 1 hour.</p> <p>Need more advice on solubility, usage and handling? Please visit our frequently asked questions (FAQ) page for more details.</p>

Applications

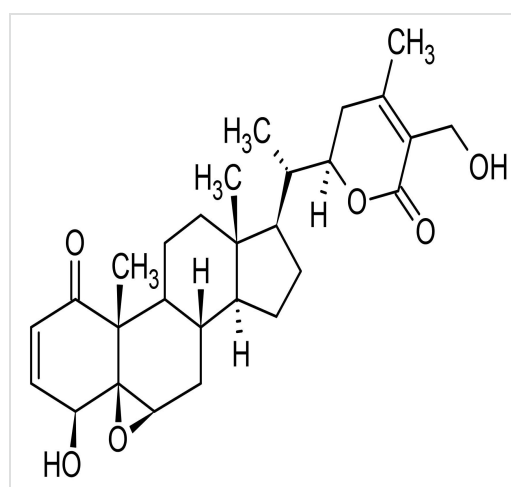
The Abpromise guarantee

Our [Abpromise guarantee](#) covers the use of ab120644 in the following tested applications.

The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

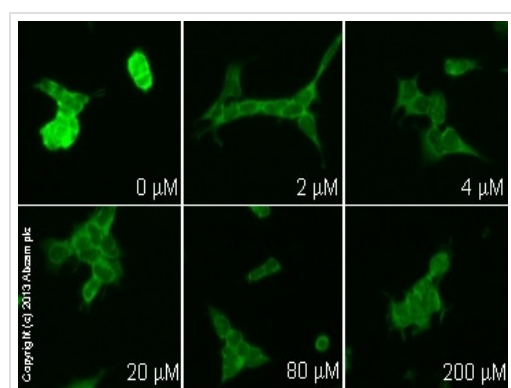
Application	Abreviews	Notes
Functional Studies		Use at an assay dependent concentration.

Images



Chemical Structure - Withaferin A from Withania somnifera (ab120644)

2D chemical structure image of ab120644, Withaferin A from Withania somnifera



Functional Studies - Withaferin A from Withania somnifera (ab120644)

[ab7973](#) staining Bcl2 in HEK 293 cells treated with withaferin A from Withania somnifera (ab120644), by ICC/IF. Decrease in Bcl2 expression with increased concentration of withaferin A from Withania somnifera, as described in literature.

The cells were incubated at 37°C for 3h in media containing different concentrations of ab120644 (withaferin A from Withania somnifera) in DMSO, fixed with 100% methanol for 5 minutes at -20°C and blocked with PBS containing 10% goat serum, 0.3 M glycine, 1% BSA and 0.1% tween for 2h at room temperature. Staining of the treated cells with [ab7973](#) (5 μg/ml) was performed overnight at 4°C in PBS containing 1% BSA and 0.1% tween. A DyLight 488 goat anti-rabbit polyclonal antibody ([ab96899](#)) at 1/250 dilution was used as the secondary antibody.

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