abcam

Product datasheet

Cantharidin, Protein phosphatases 1 and 2A (PP1, PP2A) inhibitor ab120967

2 References 2 Images

Overview

Product name Cantharidin, Protein phosphatases 1 and 2A (PP1, PP2A) inhibitor

Description Protein phosphatases 1 and 2A (PP1, PP2A) inhibitor

Biological description Protein phosphatases 1 and 2A (PP1, PP2A) inhibitor (K_i values are 1.1 and 0.19 μM,

respectively). Toxin found in Mylabris phalerata. Possesses various biological activities including

anticancer, antitumor activity.

CAS Number 56-25-7

Chemical structure

CH₃

Properties

Chemical name *rel-*(3a*R*,4S,7*R*,7a*S*)-Hexahydro-3a,7a-dimethyl-4,7-epoxyisobenzofuran-1,3-dione

Molecular weight 196.20

Molecular formula $C_{10}H_{12}O_4$

PubChem identifier 594

Storage instructions Store at +4°C. The product can be stored for up to 12 months.

Solubility overview Soluble in DMSO to 100 mM

Handling 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.

Toxic, refer to SDS for further information.

Need more advice on solubility, usage and handling? Please visit our frequently asked

questions (FAQ) page for more details.

SMILES CC12C3CCC(C1(C(=O)OC2=O)C)O3

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Applications

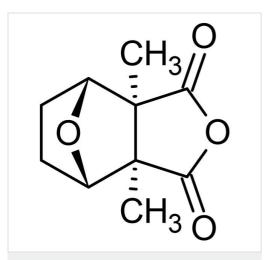
The Abpromise guarantee

Our **Abpromise guarantee** covers the use of ab120967 in the following tested applications.

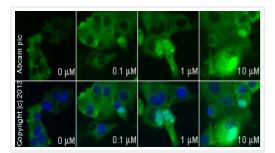
The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

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

Images



Chemical Structure - Cantharidin, Protein phosphatases 1 and 2A (PP1, PP2A) inhibitor (ab120967) 2D chemical structure image of ab120967, Cantharidin, Protein phosphatases 1 and 2A (PP1, PP2A) inhibitor



Functional Studies - Cantharidin, Protein phosphatases 1 and 2A (PP1, PP2A) inhibitor (ab120967) <u>ab7960</u> staining p21 in PANC-1 cells treated with cantharidin (ab120967), by ICC/IF. Increase of p21 expression correlates with increased concentration of cantharidin, as described in literature. The cells were incubated at 37°C for 6h in media containing different concentrations of ab120967 (cantharidin) in DMSO, fixed with 4% formaldehyde for 10 minutes at room temperature 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 <u>ab7960</u> (5 μg/ml) was performed overnight at 4°C in PBS containing 1% BSA and 0.1% tween. A DyLight 488 antirabbit polyclonal antibody (<u>ab96899</u>) at 1/250 dilution was used as the secondary antibody. Nuclei were counterstained with DAPI and are shown in blue.

Please note: All products are "FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC PROCEDURES, NOT FOR USE IN HUMANS"

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