# abcam

### Product datasheet

# 10-Hydroxycamptothecin, DNA topoisomerase I inhibitor ab141071

## 2 Images

#### Overview

Product name 10-Hydroxycamptothecin, DNA topoisomerase I inhibitor

**Description** DNA topoisomerase linhibitor

**Biological description** DNA topoisomerase I inhibitor ( $IC_{50} = 106 \text{ nM}$ ). Cytotoxic antitumour compound, more potent than

camptothecin (ab120115). In vitro and in vivo activity against a broad spectrum of cancers.

**Purity** > 99%

**CAS Number** 19685-09-7

**Chemical structure** 

#### **Properties**

Chemical name (4S)-4-Ethyl-4,9-dihydroxy-1*H*-pyrano[3',4':6,7]indolizino[1,2-*b*]quinoline-3,14(4*H*,12*H*)-dione

Molecular weight 364.36

**Molecular formula**  $C_{20}H_{16}N_2O_5$ 

PubChem identifier 4330531

**Storage instructions** Store at -20°C. Store under desiccating conditions. The product can be stored for up to 12

months.

**Solubility overview** Soluble in DMSO to 50 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.

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Synthetic

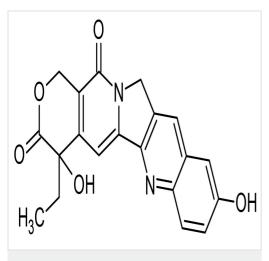
#### **Applications**

The Abpromise guarantee Our Abpromise guarantee covers the use of ab141071 in the following tested applications.

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

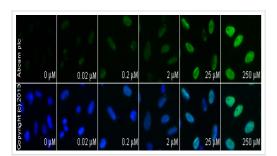
Application	Abreviews	Notes
Functional Studies		Use at an assay dependent concentration.

#### **Images**



Chemical Structure - 10-Hydroxycamptothecin, DNA topoisomerase I inhibitor (ab141071)

2D chemical structure image of ab141071, 10-Hydroxycamptothecin, DNA topoisomerase I inhibitor



Immunocytochemistry/ Immunofluorescence - 10-Hydroxycamptothecin, DNA topoisomerase I inhibitor (ab141071) <u>ab2893</u> staining γH2A.X in HeLa cells treated with 10-Hydroxycamptothecin (ab141071), by ICC/IF. Increase of γH2A.X nuclear expression correlates with increased concentration of 10-Hydroxycamptothecin, as described in literature.

The cells were incubated at 37°C for 6 hours in media containing different concentrations of ab141071 (10-Hydroxycamptothecin) 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 **ab2893** (5 µg/ml) was performed overnight at 4°C in PBS containing 1% BSA and 0.1% tween. A DyLight 488 antirabbit polyclonal antibody (**ab96899**) 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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