abcam

Product datasheet

Betulinic acid, TGR5 agonist ab120654

1 References 2 Images

Overview

Product name Betulinic acid, TGR5 agonist

Description Anticancer agent. TGR5 agonist.

Biological descriptionTriterpenoid with various biological activities. Apoptosis inducer, with anticancer properties. Also

shows anti-HIV, antimalarial and anti-inflammatory activity. TGR5 agonist (EC $_{50}$ = 1.04 μ M).

CAS Number 472-15-1

Chemical structure

H₂C ⇒ CH₃ H CO₂H

HO H CH₃ H CO₂H

H₃C CH₃

Properties

Chemical name (3β)-3-Hydroxylup-20(29)-en-28-oic acid

Molecular weight456.70Molecular formula $C_{30}H_{48}O_3$

PubChem identifier 64971

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

Solubility overview Soluble in DMSO to 50 mM (with warming)

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.

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

questions (FAQ) page for more details.

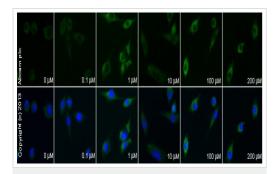
Source Synthetic

1

$$H_2C$$
 H_3
 H_4
 H_3C
 H_4
 H_3C
 H_4
 H_4
 H_3C
 H_4
 H_5
 H_6
 H_7
 H_8
 H_8

Chemical Structure - Betulinic acid, TGR5 agonist (ab120654)

2D chemical structure image of ab120654, Betulinic acid, TGR5 agonist



Functional Studies - Betulinic acid, TGR5 agonist (ab120654)

ab32557 staining p38 (phospho T180 + Y182) in MALME-3M cells treated with betulinic acid (ab120654), by ICC/IF. Increase in expression of p38 (phospho T180 + Y182) correlates with increased concentration of betulinic acid, as described in literature. The cells were incubated at 37°C for 30 minutes in media containing different concentrations of ab120654 (betulinic acid) 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 ab32557 (1/200 dilution) 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. 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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