abcam

Product datasheet

Chloroquine diphosphate, apoptosis and autophagy inhibitor ab142116

13 References 2 Images

Overview

Product name Chloroquine diphosphate, apoptosis and autophagy inhibitor

Description Antimalarial; apoptosis and autophagy inhibitor

Biological description Antimalarial agent. Inhibits tumor cell growth and metastasis and induces apoptosis *in vitro*. Binds

to Fe(II)-protoporphyrin IX (FP) to form FP-chloroquine complex resulting in cell lysis and parasite

cell autodigestion.

Purity > 98% **CAS Number** 50-63-5

Chemical structure

Properties

Chemical name N^4 -(7-Chloroquinolin-4-yl)- N^1 , N^1 -diethylpentane-1,4-diamine diphosphate

Molecular weight 515.87

Molecular formula C₁₈H₂₆ClN₃.2H₃PO₄

PubChem identifier 64927

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

months.

Solubility overview Soluble in water 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.

Refer to SDS for further information.

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

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questions (FAQ) page for more details.

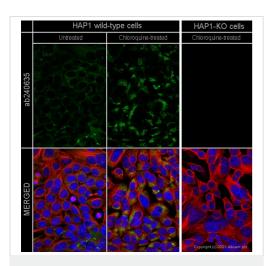
SMILES

 ${\tt CCN(CC)CCCC(C)NC1=C2C=CC(=CC2=NC=C1)CI.OP(=O)(O)O.OP((O)O)O.O$

Source

Synthetic

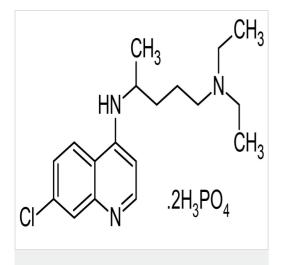
Images



Immunocytochemistry - Chloroquine diphosphate, apoptosis and autophagy inhibitor (ab142116)

ab240635 staining SQSTM1 in wild-type Hap1 cells and SQSTM1 knockout Hap1 cells treated with chloroquine (ab142116, 50μM for 24 hrs). The cells were fixed with 100% methanol (5 min) then permeabilized with 0.1% Triton X-100 for 5 minutes and then blocked with 1% BSA/10% normal goat serum/0.3M glycine in 0.1% PBS-Tween for 1h. The cells were then incubated with ab240635 at 1μg/ml concentration and ab7291 (Mouse monoclonal to alpha Tubulin) at 1/1000 dilution overnight at 4°C followed by a further incubation at room temperature for 1h with a goat secondary antibody to rabbit lgG (Alexa Fluor® 488) (ab150081) at 2 μg/ml (shown in green) and a goat secondary antibody to mouse lgG (Alexa Fluor® 594) (ab150120) at 2 μg/ml (shown in red). Nuclear DNA was labelled in blue with DAPI.

Image was taken with a confocal microscope (Leica-Microsystems TCS SP8).



Chemical Structure - Chloroquine diphosphate, apoptosis and autophagy inhibitor (ab142116) 2D chemical structure image of ab142116, Chloroquine diphosphate, apoptosis and autophagy inhibitor

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

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