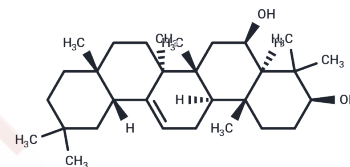


12-Oleanene-3,6-diol

Chemical Properties

CAS No. : 41498-79-7
 Formula: C₃₀H₅₀O₂
 Molecular Weight: 442.72
 Storage: Powder: -20°C for 3 years | In solvent: -80°C for 1 year
 Actual storage temperature shall be subject to the COA.



Biological Description

Description	12-Oleanene-3,6-diol has antitumor activity, it can induce apoptosis and has inhibition effect on the proliferation in RKO cell line.
Targets(IC50)	Others
In vitro	To investigate the effects of novel triterpene (12-Oleanene-3,6-diol) from <i>Celastrus hypoleucus</i> on the proliferation and apoptosis of human colorectal cancer cell line RKO. METHODS AND RESULTS: The inhibitory effect of the novel triterpene on RKO cell proliferation was assayed by MTT dye reduction. The morphology of apoptotic cells was observed with AO/EB double fluorescence staining and HE staining, DNA fragment with electrophoresis on agarose gels, sub-diploid peak and cell cycle with flow cytometer (FCM). Novel triterpene (12-Oleanene-3,6-diol) from <i>C. hypoleucus</i> significantly inhibited proliferation of RKO cells in dose-dependent and time-dependent manner, the IC ₅₀ was (12.20 +/- 0.79) microg x mL(-1) at 48 h. Typical apoptotic changes were observed in RKO cells under the fluorescence microscope and the light microscope. DNA ladder was detected on agarose gels at concentrations from 10 microg x mL(-1) to 20 microg x mL(-1) at 48 h. With FCM methods, dose-dependent apoptosis-induced effect was observed in RKO cell line after treatment of triterpene for 48 h, and the apoptotic rates were increased from (2.93 +/- 0.84) % to (50.79 +/- 6.61) % at concentrations from 2.5 microg x mL(-1) to 20 microg x mL(-1). DNA histograms data from FCM analysis showed that the number of cells was obviously reduced during G0-G1 phase and G2-M phase, but not during S phase for RKO cell line after treatment with various concentrations of the triterpene for 48 hours. CONCLUSIONS: Novel triterpene (12-Oleanene-3,6-diol) from <i>C. hypoleucus</i> can induce apoptosis and has inhibition effect on the proliferation in RKO cell line.

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	2.2588 mL	11.2938 mL	22.5876 mL
5 mM	0.4518 mL	2.2588 mL	4.5175 mL
10 mM	0.2259 mL	1.1294 mL	2.2588 mL
50 mM	0.0452 mL	0.2259 mL	0.4518 mL

Please select the appropriate solvent to prepare the stock solution, according to the solubility of the product in different solvents. Please use it as soon as possible.

Note: The dilution table applies only to solid products. For liquid products, please calculate the stock solution based on the stated concentration and/or density.

Reference

Antitumor effects of novel triterpene from *Celastrus hypoleucus* on human colorectal cancer cell line RKO in vitro. China journal of Chinese materia medica, 2006, 31(17):1450-1453.

Inhibitor · Natural Compounds · Compound Libraries · Recombinant Proteins

This product is for Research Use Only · Not for Human or Veterinary or Therapeutic Use

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