





#### Kulinone

### **Chemical Properties**

CAS No.: 21688-61-9 Formula: C30H48O2

Molecular Weight: 440.7

Appearance: N/A

Storage: 0-4°C for short term (days to weeks), or -20°C for long term (months).

# **Biological Description**

Description	Kulinone has cytotoxic effects, with IC50 values of 5.6-21.2 ug/mL, it inhibited (ED(50) 2.5-6.2 microg/mL) the P388 cancer cell line.
Targets(IC <sub>50</sub> )	Others: None
In vitro	METHODS AND RESULTS: Two new triterpenoids (1, 2) and two new steroids (3, 4) along with twelve related known compounds (5-16) were isolated from the bark of Melia azedarach. The new structures were elucidated by means of spectroscopic methods and molecular modeling studies and found to be 21,24-cycloeupha-7-ene-3 $\beta$ ,16 $\beta$ ,21 $\alpha$ ,25-tetrol (1), 3 $\beta$ -acetoxy-12 $\beta$ -hydroxy-eupha-7,24-dien-21,16 $\beta$ -olide (2), 29-hydroperoxy-stigmasta-7,24(28) E-dien-3 $\beta$ -ol (3), and 24 $\hat{1}^3$ 4-hydroperoxy-24-vinyl-lathosterol (4). All isolated compounds were tested for their cytotoxic activity against three human cancer cell lines (A549, H460, HGC27) using the CellTiter Glo™ luminescent cell viability assay. CONCLUSIONS: Among them, compounds 2- 4, 24 $\hat{1}^3$ 4-hydroperoxy-24-vinyl-cholesterol (6), Kulinone (7), meliastatin 3 (8), 3-oxo-olean-12-en-28-oic acid (10), and (22 E,24 S)-5 $\alpha$ ,8 $\alpha$ -epidioxy-24-methyl-cholesta-6,22-dien-3 $\beta$ -ol (12) were found to have cytotoxic effects, with IC50 values of 5.6-21.2 $\mu$ g/mL.

## Solubility Information

Solubility < 1 mg/ml refers to the product slightly soluble or insoluble
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### **Preparing Stock Solutions**

	1mg	5mg	10mg
1 mM	2.269 mL	11.346 mL	22.691 mL
5 mM	0.454 mL	2.269 mL	4.538 mL
10 mM	0.227 mL	1.135 mL	2.269 mL
50 mM	0.045 mL	0.227 mL	0.454 mL

Please select the appropriate solvent to prepare the stock solution, according to the solubility of the product in different solvents. The storage conditions and period of the stock solution: - 80 °C for 6 months; - 20 °C for 1 month. Please use it as soon as possible.

#### Reference

1. Cytotoxic triterpenoids and steroids from the bark of Melia azedarach. Planta Med. 2011 Jun;77(9):922-8.

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