

# Data Sheet (Cat.No.TN3925)

#### Eichlerianic acid

### **Chemical Properties**

CAS No.: 56421-13-7 Formula: C30H50O4

Molecular Weight: 474.7

Appearance: N/A

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

### **Biological Description**

Description	Eichlerianic acid is a trypanocidal compound with an IC50 value of 10 mg/mL. Eichlerianic acid may have antiviral activity against Herpes simplex virus types I and II in vitro. Eichlerianic acid shows weak cytotoxicity (IC50 6.87 to >40 $\mu$ M) against human cancer cell (HL-60, SMMC-7721, A-549, MCF-7 and SW480).		
Targets(IC <sub>50</sub> )	HSV: None		
In vitro	METHODS AND RESULTS:Twelve compounds were isolated from the roots of Aglaia odorata. Their structures were established on the basis of NMR and MS data as rocaglaol (1), rocaglamide (2), eichlerialactone (3), sapelins A (4), isofouquierone (5), Eichlerianic acid (6), shoreic acid (7), agladupol E (8), 3-epimeliantriol (9), cleomiscosins B (10), $2\beta$ ,3β-dihydroxy- $5\alpha$ -pregnane- $16$ -one (11) and $\beta$ -d-glucopyranos- $1$ -yl N-methylpyrrole- $2$ -carboxylate (12). CONCLUSIONS: Among them, compounds 1 and 2 showed significant cytotoxicity against human cancer cell (HL- $60$ , SMMC- $7721$ , A- $549$ , MCF- $7$ and SW4 $80$ ) with IC50 values of $0.007$ - $0.095$ μM, while compounds 3-5 and 10 and 11 showed moderate to no cytotoxicity (IC50 $0.43$ to values > $40$ μM). Compound 6 showed only weak cytotoxicity (IC50 $6.87$ to > $40$ μM) and its epmier 7 was completely inactivite (IC50> $40$ μM) in the assay. However, potent synergistic effect was observed when the molar ratio of 6 to 7 is between 4:1 and 1:1.		

## Solubility Information

uct slightly soluble or insoluble	Solubility
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#### **Preparing Stock Solutions**

	1mg	5mg	10mg
1 mM	2.107 mL	10.533 mL	21.066 mL
5 mM	0.421 mL	2.107 mL	4.213 mL
10 mM	0.211 mL	1.053 mL	2.107 mL
50 mM	0.042 mL	0.211 mL	0.421 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.

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#### Reference

- 1. Cytotoxicity and Synergistic Effect of the Constituents from Roots of Aglaia odorata (Meliaceae). Nat Prod Res. 2016;30(4):433-7.
- 2. In vitro antiviral activity of dammar resin triterpenoids. J Nat Prod. 1987 Jul-Aug;50(4):706-13.

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