Trametenolic acid

Cat. No.: HY-N4169

CAS No.: 24160-36-9

Molecular Formula: $C_{30}H_{48}O_3$

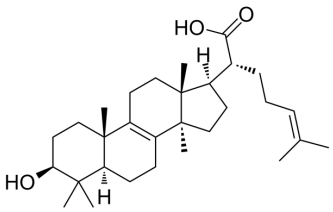
Molecular Weight: 456.7

Target: Others

Pathway: Others

Storage: 4°C, protect from light

* In solvent : -80°C, 6 months; -20°C, 1 month (protect from light)



SOLVENT & SOLUBILITY

In Vitro

DMSO : 50 mg/mL (109.48 mM; ultrasonic and warming and heat to 60°C)

Preparing Stock Solutions	Solvent / Mass / Concentration	1 mg	5 mg	10 mg
	1 mM	2.1896 mL	10.9481 mL	21.8962 mL
	5 mM	0.4379 mL	2.1896 mL	4.3792 mL
	10 mM	0.2190 mL	1.0948 mL	2.1896 mL

Please refer to the solubility information to select the appropriate solvent.

In Vivo

1. Add each solvent one by one: 10% DMSO >> 90% corn oil
   Solubility: ≥ 2.5 mg/mL (5.47 mM); Clear solution

BIOLOGICAL ACTIVITY

Description

Trametenolic acid is a lanostanol glycoside that isolated from the EtOH extract of the fruit bodies of Laetiporus versisporus [1].

IC_{50} & Target	ERK1	ERK2

In Vitro

Trametenolic acid (1 mg/mL; 15-30 mins) induces the upregulation of autophagy-related proteins (Beclin-1, Atg12, and LC3) in B16-F1 cells by activating the ERK1/2 signaling pathway[1].
Trametenolic acid (1 mg/mL; 24 hours; B16-F1 cells) has dual synergic mechanisms to exert an anti-melanogenetic effect[1].
Trametenolic acid (0.1-4 mg/mL; 52 hours; B16-F1 cells) increase melanin synthesis by approximately 20% and 40% in cells transfected with siRNAs against mTOR and Atg5, respectively[1].

MCE has not independently confirmed the accuracy of these methods. They are for reference only.

Western Blot Analysis[1]

Cell Line:	B16-F1 cells
Concentration:	1 mg/mL
Incubation Time:	15 and 30 mins
Result:	Increased the expression levels of phospho-p38, phospho-ERK1/2, Beclin-1, Atg12 and LC3 by approximately 46%, 10%, 48%, 126% and 49%, respectively.

Western Blot Analysis[1]

Cell Line:	B16-F1 cells
Concentration:	1 mg/mL
Incubation Time:	24 hours
Result:	Increased the expression of ERK1/2 and p-ERK1/2 and decreased MITF, tyrosinase, and TRP 1 levels.

REFERENCES

[1]. K Yoshikawa, et al. New lanostanoid glycosides from the fruit body of laetiporus versisporus. J Nat Prod. 1999 Apr;62(4):543-5.

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