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Zellkultur & Verbrauchsmaterial



Diagnostik & molekulare Diagnostik



Laborgeräte & Service

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Lieferung & Zahlungsart

siehe unsere [Liefer- und Versandbedingungen](#)

Zuschläge

- Mindermengenzuschlag
- Trockeneiszuschlag
- Gefahrgutzuschlag
- Expressversand

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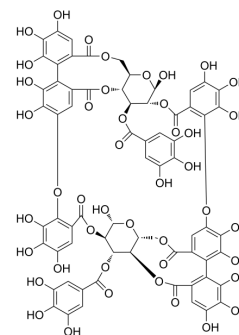
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Oenothein B

Cat. No.:	HY-N7765
CAS No.:	104987-36-2
Molecular Formula:	C ₆₈ H ₄₈ O ₄₄
Molecular Weight:	1569.08
Target:	HCV; Apoptosis; Bacterial; Fungal
Pathway:	Anti-infection; Apoptosis
Storage:	Please store the product under the recommended conditions in the Certificate of Analysis.



SOLVENT & SOLUBILITY

In Vitro

DMSO : 125 mg/mL (79.66 mM; Need ultrasonic)

Concentration	Solvent	Mass		
		1 mg	5 mg	10 mg
Preparing Stock Solutions	1 mM	0.6373 mL	3.1866 mL	6.3732 mL
	5 mM	0.1275 mL	0.6373 mL	1.2746 mL
	10 mM	0.0637 mL	0.3187 mL	0.6373 mL

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

BIOLOGICAL ACTIVITY

Description

Oenothein B is a dimeric macrocyclic ellagitannin and has widely pharmacological activities, including antioxidant, anti-inflammatory, antifungal, anti-HCV, and antitumor properties. Oenothein B is a potent and specific inhibitor of poly(ADP-ribose) glycohydrolase^{[1][2]}.

In Vitro

Oenothein B (15-45 μM; 12-72 hours) has a dose- and time-dependent inhibition rate effect on A549 cells in the range of 12 hours, 24 hours, 36 hours, 48 hours, 60 hours and 72 hours of exposure^[1].
 Oenothein B (15-45 μM; 24 hours) effectively inhibits the proliferation of A549 cells by inducing apoptosis and arresting cells at G1 stage^[1].
 Oenothein B (15-45 μM; 24 hours) not only increases the level of intracellular reactive oxygen species (ROS), but also induces the upregulation of intracellular apoptotic triggers (cleavage caspase-3, PARP, cytochrome c level in the cytosol, Bax)^[1].
 A549 cells^[1] 15 μM, 30 μM and 45 μM 24 hours Arrested cells in the G1 phase. A549 cells^[1] 15 μM, 30 μM and 45 μM 24 hours BAX, p53, cytochrome c (cytoplasm) and PARP were unregulated significantly; Anti-apoptotic Bcl-2 was decreased significantly in a concentration-dependent manner.
 MCE has not independently confirmed the accuracy of these methods. They are for reference only.
 Cell Viability Assay^[1]

	<table border="1"> <tbody> <tr> <td>Cell Line:</td> <td>A549 cells</td> </tr> <tr> <td>Concentration:</td> <td>15 μM, 30 μM and 45 μM</td> </tr> <tr> <td>Incubation Time:</td> <td>12 hours, 24 hours, 36 hours, 48 hours, 60 hours and 72 hours</td> </tr> <tr> <td>Result:</td> <td>Effectively inhibited the proliferation of A549 cells.</td> </tr> </tbody> </table>	Cell Line:	A549 cells	Concentration:	15 μ M, 30 μ M and 45 μ M	Incubation Time:	12 hours, 24 hours, 36 hours, 48 hours, 60 hours and 72 hours	Result:	Effectively inhibited the proliferation of A549 cells.
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In Vivo	<p>Oenothein B (100-300 mg/kg; p.o.) has the ability to reduce neuroinflammation in the brain during systemic inflammation in ICR mice^[3].</p> <p>MCE has not independently confirmed the accuracy of these methods. They are for reference only.</p>								

REFERENCES

- [1]. Xiaodong Pei, et al. Oenothein B inhibits human non-small cell lung cancer A549 cell proliferation by ROS-mediated PI3K/Akt/NF- κ B signaling pathway. *Chem Biol Interact.* 2019 Jan 25;298:112-120.
- [2]. Satoru Tamura, et al. Oenothein B, dimeric hydrolysable tannin inhibiting HCV invasion from *Oenothera erythrosepala*. *J Nat Med.* 2019 Jan;73(1):67-75.
- [3]. Satoshi Okuyama, et al. Oenothein B suppresses lipopolysaccharide (LPS)-induced inflammation in the mouse brain. *Int J Mol Sci.* 2013 May 7;14(5):9767-78.

Caution: Product has not been fully validated for medical applications. For research use only.

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