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Lieferung & Zahlungsart

siehe unsere [Liefer- und Versandbedingungen](#)

Zuschläge

- Mindermengenzuschlag
- Trockeneiszuschlag
- Gefahrgutzuschlag
- Expressversand

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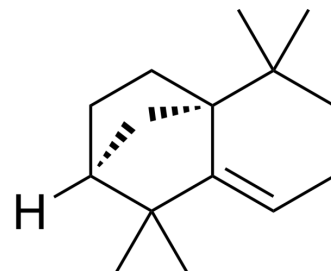
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Isolongifolene

Cat. No.:	HY-N7363		
CAS No.:	1135-66-6		
Molecular Formula:	C ₁₅ H ₂₄		
Molecular Weight:	204.35		
Target:	Apoptosis		
Pathway:	Apoptosis		
Storage:	Pure form	-20°C	3 years
		4°C	2 years
	In solvent	-80°C	6 months
		-20°C	1 month



SOLVENT & SOLUBILITY

In Vitro	DMSO : 10 mg/mL (48.94 mM; Need ultrasonic)				
		Solvent Concentration	Mass 1 mg	5 mg	10 mg
	Preparing Stock Solutions	1 mM	4.8936 mL	24.4678 mL	48.9356 mL
		5 mM	0.9787 mL	4.8936 mL	9.7871 mL
10 mM		0.4894 mL	2.4468 mL	4.8936 mL	
Please refer to the solubility information to select the appropriate solvent.					
In Vivo	<ol style="list-style-type: none"> Add each solvent one by one: 10% DMSO >> 40% PEG300 >> 5% Tween-80 >> 45% saline Solubility: 1 mg/mL (4.89 mM); Suspended solution; Need ultrasonic Add each solvent one by one: 10% DMSO >> 90% (20% SBE-β-CD in saline) Solubility: 1 mg/mL (4.89 mM); Suspended solution; Need ultrasonic Add each solvent one by one: 10% DMSO >> 90% corn oil Solubility: ≥ 1 mg/mL (4.89 mM); Clear solution 				

BIOLOGICAL ACTIVITY

Description	Isolongifolene ((-)-Isolongifolene) is a tricyclic sesquiterpene isolated from <i>Murraya koenigii</i> . Isolongifolene attenuates Rotenone-induced oxidative stress, mitochondrial dysfunction and apoptosis through the regulation of PI3K/AKT/GSK-3β signaling pathways. Isolongifolene has antioxidant, anti-inflammatory, anticancer and neuroprotective properties ^[1] .
In Vitro	Isolongifolene (0-50 μM; 26 hours; SH-SY5Y neuroblastoma cells) treatment significantly alleviates Rotenone-induced cytotoxicity in SH-SY5Y cells in a dose-dependent manner ^[1] . Isolongifolene (10 μM; 26 hours; SH-SY5Y neuroblastoma cells) treatment attenuates Rotenone-induced apoptosis in SH-

SY5Y cells^[1].

Isolongifolene (10 μ M; 26 hours; SH-SY5Y neuroblastoma cells) treatment attenuates Rotenone induced toxicity by down-regulating Bax, caspases-3, 6, 8 and 9 expression and up-regulating of Bcl-2 expression. Furthermore regulation of p-P13K, p-AKT and p-GSK-3 β expression by Isolongifolene^[1].

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

Cell Viability Assay^[1]

Cell Line:	SH-SY5Y neuroblastoma cells
Concentration:	0 μ M, 1 μ M, 2.5 μ M, 5 μ M, 10 μ M, 20 μ M and 50 μ M
Incubation Time:	26 hours
Result:	Significantly alleviated Rotenone-induced cytotoxicity in SH-SY5Y cells.

Apoptosis Analysis^[1]

Cell Line:	SH-SY5Y neuroblastoma cells
Concentration:	10 μ M
Incubation Time:	26 hours
Result:	Attenuated Rotenone-induced apoptosis in SH-SY5Y cells.

Western Blot Analysis^[1]

Cell Line:	SH-SY5Y neuroblastoma cells
Concentration:	10 μ M
Incubation Time:	26 hours
Result:	Attenuated rotenone induced toxicity by down-regulating Bax, caspases-3, 6, 8 and 9 expression and up-regulating of Bcl-2 expression. Prevented the rotenone-induced decreased phosphorylation of GSK-3 β .

REFERENCES

[1]. Balakrishnan R, et al. Isolongifolene attenuates rotenone-induced mitochondrial dysfunction, oxidative stress and apoptosis. *Front Biosci (Schol Ed)*. 2018 Jan 1;10:248-261.

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

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