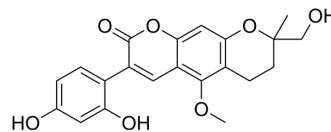


Licopyranocoumarin

Cat. No.:	HY-119804
CAS No.:	117038-80-9
Molecular Formula:	C ₂₁ H ₂₀ O ₇
Molecular Weight:	384.38
Target:	Cytochrome P450
Pathway:	Metabolic Enzyme/Protease
Storage:	Please store the product under the recommended conditions in the Certificate of Analysis.



BIOLOGICAL ACTIVITY

Description	Licopyranocoumarin is an isoflavonoid that shows CYP3A4 inhibitory activity with an IC ₅₀ of 32 μM. Licopyranocoumarin has potent neuroprotective activities ^[1] .																
IC₅₀ & Target	CYP3A4 32 μM (IC ₅₀)																
In Vitro	<p>Licopyranocoumarin (0.3-3 μM; 48 hours) markedly blocks MPP⁺-induced neuronal PC12D cell death and disappearance of mitochondrial membrane potential, which were mediated by JNK^[1].</p> <p>Licopyranocoumarin (0.3-3 μM; 36 hours) inhibits MPP⁺-induced JNK activation through the suppression of reactive oxygen species (ROS) generation, thereby inhibiting MPP⁺-induced neuronal PC12D cell death^[1].</p> <p>MCE has not independently confirmed the accuracy of these methods. They are for reference only.</p> <p>Cell Viability Assay^[1]</p> <table border="1"> <tr> <td>Cell Line:</td> <td>PC12D cell</td> </tr> <tr> <td>Concentration:</td> <td>0.3 μM, 1 μM, 3 μM</td> </tr> <tr> <td>Incubation Time:</td> <td>48 hours</td> </tr> <tr> <td>Result:</td> <td>Inhibited MPP⁺-induced cell death.</td> </tr> </table> <p>Western Blot Analysis^[1]</p> <table border="1"> <tr> <td>Cell Line:</td> <td>PC12D cell</td> </tr> <tr> <td>Concentration:</td> <td>0.3 μM, 1 μM, 3 μM</td> </tr> <tr> <td>Incubation Time:</td> <td>36 hours</td> </tr> <tr> <td>Result:</td> <td>Attenuated JNK activity induced by MPP⁺.</td> </tr> </table>	Cell Line:	PC12D cell	Concentration:	0.3 μM, 1 μM, 3 μM	Incubation Time:	48 hours	Result:	Inhibited MPP ⁺ -induced cell death.	Cell Line:	PC12D cell	Concentration:	0.3 μM, 1 μM, 3 μM	Incubation Time:	36 hours	Result:	Attenuated JNK activity induced by MPP ⁺ .
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REFERENCES

[1]. Takahiro Fujimaki, et al. Identification of licopyranocoumarin and glycyrurol from herbal medicines as neuroprotective compounds for Parkinson's disease. PLoS One. 2014 Jun 24;9(6):e100395.

[2]. Sachiko Tsukamoto, et al. CYP3A4 inhibitors isolated from Licorice. Biol Pharm Bull. 2005 Oct;28(10):2000-2.

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

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