

## **Product** Data Sheet

## **Kurarinol**

Cat. No.: HY-122933 CAS No.: 855746-98-4 Molecular Formula:  $C_{26}H_{32}O_7$  Molecular Weight: 456.53

Target: Tyrosinase; Apoptosis

Pathway: Metabolic Enzyme/Protease; Apoptosis

Storage: Please store the product under the recommended conditions in the Certificate of

Analysis.

## **BIOLOGICAL ACTIVITY**

Description	Kurarinol is a flavanone found in the root of Sophora flavescens. Kurarinol is a competitive tyrosinase inhibitor, with IC <sub>50</sub> of $0.1\mu\text{M}$ for mushroom tyrosinase <sup>[1]</sup> .	
IC <sub>50</sub> & Target	IC50: 0.1 $\mu$ M (mushroom tyrosinase) <sup>[1]</sup>	
In Vitro	Kurarinol manifests relatively low cytotoxic activity (EC <sub>50</sub> >30 μM) <sup>[1]</sup> .  Kurarinol inhibits production of melanin in S. bikiniensis without affecting the growth of microorganism <sup>[1]</sup> .  Kurarinol induces hepatocellular carcinoma cell apoptosis through suppressing cellular signal transducer and activator of transcription 3 signaling (STAT3) <sup>[2]</sup> .  MCE has not independently confirmed the accuracy of these methods. They are for reference only.	
In Vivo	Kurarinol (20 mg/kg; p.o.; daily; for 3 days) reduces serum lipid levels in high-Cholesterol diet induced hyperlipidemic rats <sup>[3]</sup> . MCE has not independently confirmed the accuracy of these methods. They are for reference only.	
	Animal Model:	Male Sprague-Dawley rats (120-130g), hypercholesterolemic models <sup>[3]</sup>
	Dosage:	20 mg/kg
	Administration:	Oral administration, daily, for 3 days

## **REFERENCES**

 $[1]. \ Y\ B\ Ryu, et\ al.\ Kurarinol, tyrosinase\ inhibitor\ isolated\ from\ the\ root\ of\ Sophora\ flavescens.\ Phytomedicine.\ 2008\ Aug; 15(8):612-8.$ 

[2]. Guangwen Shu, et al. Kurarinol induces hepatocellular carcinoma cell apoptosis through suppressing cellular signal transducer and activator of transcription 3 signaling. Toxicol Appl Pharmacol. 2014 Dec 1;281(2):157-65.

[3]. Hyun Young Kim, et al. Hypolipidemic effects of Sophora flavescens and its constituents in poloxamer 407-induced hyperlipidemic and cholesterol-fed rats. Biol Pharm Bull. 2008 Jan;31(1):73-8.

 $\label{lem:caution:Product} \textbf{Caution: Product has not been fully validated for medical applications. For research use only.}$ 

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