**Natural Products** 



# **Kurarinol Datasheet**

5<sup>th</sup> Edition (Revised in January, 2017)

## [ Product Information ]

Name: Kurarinol

Catalog No.: CFN92533

Cas No.: 855746-98-4

**Purity:** > 95%

**M.F:** C<sub>26</sub>H<sub>32</sub>O<sub>7</sub>

**M.W:** 456.5

Physical Description: Cryst.

Synonyms:

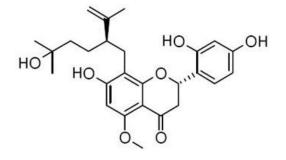
## [ Intended Use ]

- 1. Reference standards;
- 2. Pharmacological research;
- 3. Synthetic precursor compounds;
- 4. Cosmetic research;
- 5. Intermediates & Fine Chemicals;
- 6. Others.

## [Source]

The root of Sophora flavescens.

## [ Biological Activity or Inhibitors]



Kurarinol has extremely strong tyrosinase inhibitory activity, it leads to inhibition of the oxidation of I-tyrosine to melanin by mushroom tyrosinase ( $IC_{50}$  of 100 nM).<sup>[1]</sup>

Kurarinol can improve specific and non-specific cell immunity in patients with chronic hepatitis B(CHB), it is one of the mechanisms that Kurarinol can clear or inhibit HBV of patients with CHB.<sup>[2]</sup>

Kurarinol induces hepatocellular carcinoma cell apoptosis through suppressing cellular signal transducer and activator of transcription 3 signaling.<sup>[3]</sup>

Kurarinol shows significant inhibitory activities against intracellular reactive oxygen species (ROS) levels as well as NF-kappaB activation by tert-butylhydroperoxide (t-BHP).<sup>[4]</sup>

#### [Solvent]

Chloroform, Dichloromethane, Ethyl Acetate, DMSO, Acetone, etc.

#### [ HPLC Method ]<sup>[5]</sup>

Mobile phase: Formic acid -Acetonitrile,gradient elution ; Flow rate: 1.0 ml/min; Column temperature: 30 ℃; The wave length of determination: 280 nm.

## [Storage]

2-8°C, Protected from air and light, refrigerate or freeze.

## [References]

[1] Ryu Y B, Westwood I M, Kang N S, et al. Phytomedicine., 2008, 15(8):612-8.

- [2] Gu X B. Zhonghua shi yan he lin chuang bing du xue za zhi, 2009, 23(4):288-91.
- [3] Shu G, Yang J, Zhao W, et al. Toxicol. Appl. Pharmacol., 2014, 281(2):157-65.
- [4] Jung H A, Jeong D M, Chung H Y, et al. Biol. Pharm.Bull., 2008, 31(5):908-15.

[5] Zhang Q H, Yu J B, Wang Y Y, et al. Molecules, 2016, 21(8):989.

## [ Contact ]

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