SZABO SCANDIC

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Produktinformation

- Forschungsprodukte & Biochemikalien
- Zellkultur & Verbrauchsmaterial
- Diagnostik & molekulare Diagnostik
- Laborgeräte & Service

Weitere Information auf den folgenden Seiten!
See the following pages for more information!

Lieferung & Zahlungsart

siehe unsere Liefer- und Versandbedingungen

Zuschläge

- Mindermengenzuschlag
- Trockeneiszuschlag
- Gefahrgutzuschlag
- Expressversand

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Kurarinone

Cat. No.: HY-N2279

CAS No.: 34981-26-5

Molecular Formula: $C_{26}H_{30}O_6$

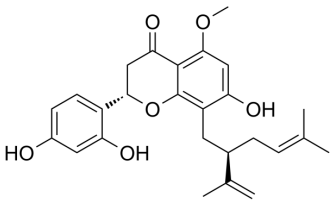
Molecular Weight: 438.51

Target: Eukaryotic Initiation Factor (eIF)

Pathway: Cell Cycle/DNA Damage

Storage: 4°C, protect from light

* In solvent : -80°C, 6 months; -20°C, 1 month (protect from light)



SOLVENT & SOLUBILITY

In Vitro

DMSO : 50 mg/mL (114.02 mM; Need ultrasonic)

Preparing Stock Solutions

Solvent / Mass / Concentration	1 mg	5 mg	10 mg
1 mM	2.2804 mL	11.4022 mL	22.8045 mL
5 mM	0.4561 mL	2.2804 mL	4.5609 mL
10 mM	0.2280 mL	1.1402 mL	2.2804 mL

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

In Vivo

1. Add each solvent one by one: 20% HP-β-CD in saline
   Solubility: 10 mg/mL (22.80 mM); Clear solution; Need ultrasonic and warming and heat to 60°C
2. Add each solvent one by one: 10% DMSO >> 40% PEG300 >> 5% Tween-80 >> 45% saline
   Solubility: ≥ 2.5 mg/mL (5.70 mM); Clear solution
3. Add each solvent one by one: 10% DMSO >> 90% (20% SBE-β-CD in saline)
   Solubility: ≥ 2.5 mg/mL (5.70 mM); Clear solution

BIOLOGICAL ACTIVITY

Description

Kurarinone is an orally active flavonoid isolated from matrine that inhibits the pathogenesis of experimental autoimmune encephalomyelitis by inhibiting cell differentiation of Th1 and Th17. Kurarinone has antitumor and anti-inflammatory activity[1][2][3].

In Vitro

Ergothioneine (0.25, 1 mM, 23 h) can regulate PC12 DNA damage, MAPKs activation and cell death induced by hydrogen peroxide[1].

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

Cell Viability Assay[2]

Cell Line:	PC3
Concentration:	10, 20, 50 μM
Incubation Time:	48 h
Result:	Suppressed the proliferation of PC3 cells in a dose-dependent manner.

Western Blot Analysis[2]

Cell Line:	PC3, HeLa, TIG1
Concentration:	50 μM
Incubation Time:	6 h
Result:	Upregulated the expression of TRB3 and ATF4 proteins. Induced PERK phosphorylation and p21 protein expression. Reduced the expression of cyclin D1 and cyclin A.

In Vivo

Kurarinone (100 mg/kg, □□, □ 21-42 □) □□□□□□□□□ (CIA) □□□□□□□□□□□□□[3]□
Kurarinone (100 mg/kg, p.o., from day 21-42) has a therapeutic effect in a mouse model of collagen-induced arthritis (CIA)[3].
MCE has not independently confirmed the accuracy of these methods. They are for reference only.

Animal Model:	CIA Mouse Model[3]
Dosage:	100 mg/kg
Administration:	p.o.
Result:	Reduced the levels of proinflammatory cytokines, TNF-α, IL-6, IFN-γ, and IL-17A. Reduced STAT1 and STAT3 phosphorylation and the proportions of Th1 and Th17 cells in lymph nodes.

CUSTOMER VALIDATION

- J Adv Res. 2024 Mar 22:S2090-1232(24)00113-9.
- Environ Toxicol. 2022 Sep 17.

See more customer validations on www.MedChemExpress.com

REFERENCES

[1]. Nishikawa S, et al. Kurarinone from Sophora Flavescens Roots Triggers ATF4 Activation and Cytostatic Effects Through PERK Phosphorylation. Molecules. 2019 Aug 27;24(17):3110.

[2]. Tang KT, et al. Kurarinone Attenuates Collagen-Induced Arthritis in Mice by Inhibiting Th1/Th17 Cell Responses and Oxidative Stress. Int J Mol Sci. 2021 Apr 13;22(8):4002.

[3]. Xie L, et al. The flavonoid kurarinone inhibits clinical progression of EAE through inhibiting Th1 and Th17 cell differentiation and proliferation. Int Immunopharmacol. 2018 Sep;62:227-236.

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

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