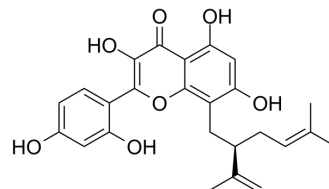


Kushenol C

Cat. No.:	HY-108966
CAS No.:	99119-73-0
Molecular Formula:	C ₂₅ H ₂₆ O ₇
Molecular Weight:	438.47
Target:	Beta-secretase
Pathway:	Neuronal Signaling
Storage:	Please store the product under the recommended conditions in the Certificate of Analysis.



BIOLOGICAL ACTIVITY

Description	Kushenol C, isolated from the roots of <i>Sophora flavescens</i> , shows anti-inflammatory and anti-oxidative stress activities. Kushenol C inhibits BACE1 (β -site APP cleaving enzyme 1) with an IC ₅₀ of 5.45 μ M ^{[1][2]} .
In Vitro	<p>Kushenol C dose-dependently suppresses the production of inflammatory mediators, including NO, PGE₂, IL-6, IL1β, MCP-1, and IFN-β in LPS-stimulated RAW264.7 macrophages. Kushenol C (50-100 μM;) significantly decreases the phosphorylation of both STAT1 molecules and STAT6 in a dose-dependent manner in LPS-stimulated RAW264.7 cells^[1].</p> <p>Kushenol C upregulates the expression of HO-1 and its activities in the LPS-stimulated RAW264.7 macrophages. In HaCaT cells, Kushenol C prevents DNA damage and cell death by upregulating the endogenous antioxidant defense system involving glutathione, superoxide dismutase, and catalase, which prevents reactive oxygen species production from tert-butyl hydroperoxide (tBHP)-induced oxidative stress in HaCaT cells^[1].</p> <p>Kushenol C inhibits BChE and AChE with IC₅₀s of 54.86 and 33.13 μM^[2].</p> <p>MCE has not independently confirmed the accuracy of these methods. They are for reference only.</p>

REFERENCES

- [1]. Cho BO, et al. In vitro Anti-Inflammatory and Anti-Oxidative Stress Activities of Kushenol C Isolated from the Roots of *Sophora flavescens*. *Molecules*. 2020;25(8):1768. Published 2020 Apr 12.
- [2]. Jung HA, et al. Selective inhibition of prenylated flavonoids from *Sophora flavescens* against BACE1 and cholinesterases. *Am J Chin Med*. 2010;38(2):415-429.

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

Tel: 609-228-6898

Fax: 609-228-5909

E-mail: tech@MedChemExpress.com

Address: 1 Deer Park Dr, Suite Q, Monmouth Junction, NJ 08852, USA