

Fortunellin

Cat. No.: HY-119678

CAS No.: 20633-93-6

Molecular Formula: $C_{28}H_{32}O_{14}$ Molecular Weight: 592.55

Target: AMPK; Keap1-Nrf2

Pathway: Epigenetics; PI3K/Akt/mTOR; NF-κB

Storage: -20°C, protect from light

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

Product Data Sheet

BIOLOGICAL ACTIVITY

Description	Fortunellin, is a flavonoid, that can be isolated from the fruits of Fortunella margarita (kumquat). Fortunellin exhibits little toxicity to mice and suppresses inflammation and ROS generation in H9C2 cells induced by LPS. Fortunellin protects against fructose-induced inflammation and oxidative stress by enhancing AMPK/Nrf2 pathway. Fortunellin can be used for diabetic cardiomyopathy research ^[1] .
In Vitro	Fortunellin promotes AMPK phosphorylation to induce Nrf2 signaling, resulting in a significant decrease in oxidative stress via upregulating SOD, CAT and HO-1 as antioxidant factors ^[2] . MCE has not independently confirmed the accuracy of these methods. They are for reference only.

REFERENCES

[1]. Zhao C, et al. Fortunellin protects against high fructose-induced diabetic heart injury in mice by suppressing inflammation and oxidative stress via AMPK/Nrf-2 pathway regulation. Biochem Biophys Res Commun. 2017 Aug 19;490(2):552-559.

[2]. Entezari M, et al. AMPK signaling in diabetes mellitus, insulin resistance and diabetic complications: A pre-clinical and clinical investigation. Biomed Pharmacother. 2022 Feb;146:112563.

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

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