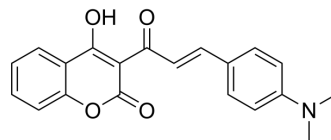


LM-021

Cat. No.:	HY-157992
Molecular Formula:	C ₂₀ H ₁₇ NO ₄
Molecular Weight:	335.35
Target:	Interleukin Related; Caspase; Lactate Dehydrogenase; Reactive Oxygen Species
Pathway:	Immunology/Inflammation; Apoptosis; Metabolic Enzyme/Protease; NF-κB
Storage:	Please store the product under the recommended conditions in the Certificate of Analysis.



BIOLOGICAL ACTIVITY

Description	LM-021 is a coumarin-chalcone derivative with anti-aggregatory, antioxidant, neuroprotective and anti-inflammatory properties which suppresses nitric oxide (NO), IL-1β, IL-6, TNF-α production, CD68 antigen (CD68) and histocompatibility-2 (MHCII) expression. LM-021 also attenuates the increase of caspase 1 activity, lactate dehydrogenase release and ROS level. LM-021 can be used for neurological research ^[1] .		
IC₅₀ & Target	IL-1β	IL-6	Caspase-1
In Vitro	LM-021 (10 μM, 8 h pre-treatment, 20 h with inflammation) effectively reduces the expression of NO, IL-1β, IL-6, NLRP3, GAL3, IBA1, CD68 and MHCII, accompanying with alleviation of the transformed morphology on mouse BV-2 microglia ^[1] . LM-021 (10 μM, 8 h) reduces the cellular oxidative stress and associated polyQ aggregation, as well as promoting neurite outgrowth in SH-SY5Y cells ^[1] . MCE has not independently confirmed the accuracy of these methods. They are for reference only.		

REFERENCES

[1]. Chen IC, et al. Investigating the therapeutic effects of novel compounds targeting inflammatory IL-1β and IL-6 signaling pathways in spinocerebellar ataxia type 3. *Eur J Pharmacol.* 2024 Mar 15;967:176370.

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

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