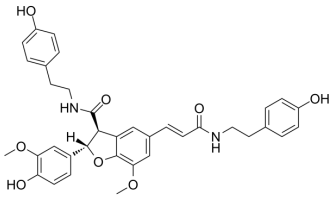
Grossamide

Cat. No.:	HY-N3979
CAS No.:	80510-06-1
Molecular Formula:	$C_{36}H_{36}N_2O_8$
Molecular Weight:	624.68
Target:	Others
Pathway:	Others
Storage:	Please store the product under the recommended conditions in the Certificate of Analysis.



BIOLOGICAL ACTIVITY

Description

Grossamide is a natural product that can be isolated from fructus cannabis, the dried fruit of Cannabis sativa L.. Grossamide has anti-neuroinflammatory effects[1].

In Vitro

Grossamide downregulates LPS-mediated production of inflammatory molecules[1].
Grossamide (0-20 μM, 1 h) inhibits the mRNA levels of TNF-α and IL-6 in a dose-dependent manner, inhibits LPS-induced NF-κB activation, and inhibits LPS-induced TLR4 and MyD88 expression without cytotoxicity[1].
MCE has not independently confirmed the accuracy of these methods. They are for reference only.

RT-PCR[1]

Cell Line:	BV-2 microglia cell
Concentration:	0, 10, 15, and 20 μM
Incubation Time:	1 h and co-cultured with LPS (100 ng/mL) for another 6 h
Result:	Inhibited the mRNA levels of TNF-α and IL-6 in a dose-dependent manner.

Western Blot Analysis[1]

Cell Line:	BV-2 microglia cell
Concentration:	0, 10, 15, and 20 μM
Incubation Time:	1 h followed by LPS (100 ng/mL) stimulation for 1 h or 24 h
Result:	Inhibited LPS-induced phosphorylation of IκBα and significantly reduced phosphorylation of NF-κB p65 levels. Dose-dependently decreased the expression of TLR4 and MyD88.

Cell Viability Assay[1]

Cell Line:	BV-2 microglia cell
Concentration:	0, 10, 15, and 20 μM
Incubation Time:	1 h and co-cultured in the absence or presence of 100 ng/ mL LPS for 24 h

Result:	Had no cytotoxicity.

REFERENCES

[1]. Luo Q, et al. Anti-neuroinflammatory effects of grossamide from hemp seed via suppression of TLR-4-mediated NF-κB signaling pathways in lipopolysaccharide-stimulated BV2 microglia cells. Mol Cell Biochem. 2017 Apr;428(1-2):129-137.

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