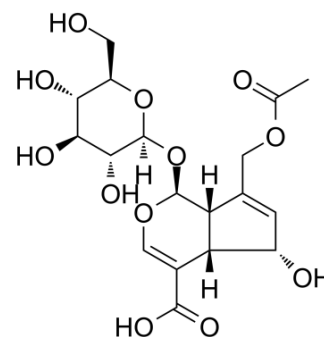


Asperulosidic Acid

Cat. No.:	HY-N6246
CAS No.:	25368-11-0
Molecular Formula:	C ₁₈ H ₂₄ O ₁₂
Molecular Weight:	432.38
Target:	NF-κB; ERK
Pathway:	NF-κB; MAPK/ERK Pathway; Stem Cell/Wnt
Storage:	Please store the product under the recommended conditions in the COA.



BIOLOGICAL ACTIVITY

Description

Asperulosidic Acid (ASPA), a bioactive iridoid glycoside, is extracted from the herbs of *Hedyotis diffusa* Willd. Asperulosidic Acid (ASPA) has anti-tumor, anti-oxidant, and anti-inflammatory activities^[1]. ASPA is related to the inhibition of inflammatory cytokines (TNF-α, IL-6) and mediators via suppression of the NF-κB and mitogen-activated protein kinase (MAPK) signaling pathways^[2].

In Vitro

Asperulosidic Acid (ASPA) (40-160 μg/mL; pre- 1 hour) significantly down-regulates the mRNA levels of TNF-α and IL-6 in LPS-induced RAW 264.7 cells compared with the group treated with LPS alone ^[1]. Asperulosidic Acid (ASPA) (40-160 μg/mL; pre- 1 hour) decreases IκB-α phosphorylation in a concentration-dependent manner, decreases Erk1/2 phosphorylation at all concentration levels, but there was no effect on p-p38 ^[1]. RT-PCR^[2]

Cell Line:	RAW 264.7 cells
Concentration:	40 μg/mL, 80 μg/mL, and 160 μg/mL
Incubation Time:	Pre-treatment 1 hour
Result:	Decreased TNF-α and IL-6 mRNA expression.

Western Blot Analysis^[2]

Cell Line:	RAW 264.7 cells
Concentration:	40 μg/mL, 80 μg/mL, and 160 μg/mL
Incubation Time:	Pre-treatment 1 hour
Result:	Decreased IκB-α phosphorylation and Erk1/2 phosphorylation.

REFERENCES

[1]. Xianyuan L , et al. Anti-renal fibrosis effect of asperulosidic acid via TGF-β1/smad2/sm3 and NF-κB signaling pathways in a rat model of unilateral ureteral obstruction. *Phytomedicine*. 2019 Feb;53:274-285.

[2]. He J, et al. Asperuloside and Asperulosidic Acid Exert an Anti-Inflammatory Effect via Suppression of the NF- κ B and MAPK Signaling Pathways in LPS-Induced RAW 264.7 Macrophages. *Int J Mol Sci.* 2018 Jul 12;19(7). pii: E2027.

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

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