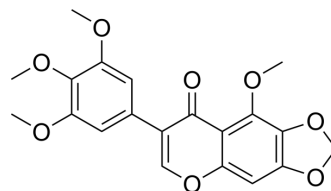


Irisfloreantin

Cat. No.:	HY-N0268
CAS No.:	41743-73-1
Molecular Formula:	C ₂₀ H ₁₈ O ₈
Molecular Weight:	386.35
Target:	NO Synthase
Pathway:	Immunology/Inflammation
Storage:	4°C, protect from light * In solvent : -80°C, 6 months; -20°C, 1 month (protect from light)



SOLVENT & SOLUBILITY

In Vitro	DMSO : 50 mg/mL (129.42 mM; Need ultrasonic)						
	Preparing Stock Solutions	Solvent Concentration	Mass	1 mg	5 mg	10 mg	
				1 mM	2.5883 mL	12.9416 mL	25.8833 mL
				5 mM	0.5177 mL	2.5883 mL	5.1767 mL
				10 mM	0.2588 mL	1.2942 mL	2.5883 mL
Please refer to the solubility information to select the appropriate solvent.							
In Vivo	1. Add each solvent one by one: 10% DMSO >> 90% corn oil Solubility: ≥ 2.17 mg/mL (5.62 mM); Clear solution						

BIOLOGICAL ACTIVITY

Description	Irisfloreantin, a naturally occurring isoflavone, is an abundant active constituent in <i>Belamcanda chinensis</i> . Irisfloreantin markedly reduces the transcriptional and translational levels of inducible nitric oxide synthase (iNOS) as well as the production of NO. Anti-inflammatory activity ^[1] .
IC ₅₀ & Target	iNOS
In Vitro	<p>Irisfloreantin does not affect the LPS-stimulated RAW 264.7 macrophages viability up to a concentration of 40 μM^[1].</p> <p>Irisfloreantin (10-40 μM) inhibits the LPS-induced production of NO in a concentration-dependent manner without affecting the iNOS activity in RAW 264.7 macrophages^[1].</p> <p>Irisfloreantin (10-40 μM) concentration dependently inhibits the LPS (10 ng/mL)-induced increase in iNOS mRNA expression in LPS stimulated RAW 264.7 macrophages. Irisfloreantin (10-40 μM) concentration-dependently suppresses the production of TNF-α, IL-1β and IL-6 in LPS stimulated RAW 264.7 macrophages^[1].</p> <p>Irisfloreantin (10-40 μM) concentration dependently inhibits the LPS (10 ng/mL)-induced increase in iNOS protein levels.</p> <p>Irisfloreantin (10-40 μM) concentration-dependently suppresses LPS-induced p38 and ERK1/2 phosphorylation in a</p>

concentration-dependent manner, but slightly affects JNK phosphorylation^[1].

MCE has not independently confirmed the accuracy of these methods. They are for reference only.

RT-PCR^[1]

Cell Line:	LPS-stimulated RAW 264.7 macrophages
Concentration:	10, 20, 40 μ M
Incubation Time:	
Result:	Inhibited the LPS (10 ng/mL)-induced increase in iNOS mRNA expression. Suppressed the production of TNF- α , IL-1 β and IL-6.

Western Blot Analysis^[1]

Cell Line:	LPS-stimulated RAW 264.7 macrophages
Concentration:	10, 20, 40 μ M
Incubation Time:	
Result:	Inhibited the LPS (10 ng/mL)-induced increase in iNOS protein levels. Suppressed LPS-induced p38 and ERK1/2 phosphorylation, but slightly affected JNK phosphorylation.

REFERENCES

[1]. Gao Y, et al. Suppressive effects of irisfloreantin on LPS-induced inflammatory responses in RAW 264.7 macrophages. *Exp Biol Med* (Maywood). 2014 Aug;239(8):1018-1024.

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

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