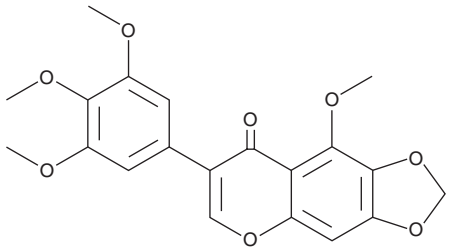
PRODUCT INFORMATION

Irisflorentin

Item No. 46194

CAS Registry No.:	41743-73-1
Formal Name:	9-methoxy-7-(3,4,5-trimethoxyphenyl)-8H-1,3-dioxolo[4,5-g][1]benzopyran-8-one
Synonyms:	41743-73-1
MF:	$C_{20}H_{18}O_8$
FW:	386.4
Purity:	≥98%
Supplied as:	A solid
Storage:	-20°C
Stability:	≥4 years
Item Origin:	Synthetic



Information represents the product specifications. Batch specific analytical results are provided on each certificate of analysis.

Laboratory Procedures

Irisflorentin is supplied as a solid. A stock solution may be made by dissolving the irisflorentin in the solvent of choice, which should be purged with an inert gas. Irisflorentin is sparingly soluble (1-10 mg/ml) in DMSO.

Description

Irisflorentin is an isoflavone that has been found in *B. chinensis* and has anti-inflammatory and cytoprotective activities.[1-3] It reduces LPS-induced increases in the levels of nitric oxide (NO), inducible NO synthase (iNOS), TNF-α, IL-1β, and IL-6 in RAW 264.7 macrophages at 10, 20, and 40 µM.[1] Irisflorentin increases phagocytosis of *E. coli* by RAW 264.7 macrophages at 40 µM and prevents M1 polarization in mouse bone marrow-derived macrophages (BMDMs).[2] It also reduces the secretion of IL-6, TNF-α, and IL-10 induced by heat-inactivated methicillin-resistant *S. aureus* (HK-MRSA) in mouse BMDMs. Irisflorentin activates the PI3K, mTOR, and BDNF signaling pathways, increases cell viability, and reduces lactate dehydrogenase (LDH) release, reactive oxygen species (ROS) production, and apoptosis in a PC12 cellular model of ischemic stroke using oxygen-glucose deprivation and reoxygenation.[3]

References

1. Gao, Y., Fang, L., Liu, F., *et al.* Suppressive effects of irisflorentin on LPS-induced inflammatory responses in RAW 264.7 macrophages. *Exp. Biol. Med. (Maywood)* **239(8)**, 1018-1024 (2014).
2. Xiang, T., Zou, Y., Jiang, X., *et al.* Irisflorentin promotes bacterial phagocytosis and inhibits inflammatory responses in macrophages during bacterial infection. *Heliyon* **10(1)**, e23225 (2023).
3. Y., Z., Lu, T., Luo, X., *et al.* Elucidating the mechanism of anti-ischemic stroke action of Irisflorentin: A combined approach using network pharmacology, molecular docking, and in vitro validation. *Eur. J. Med. Chem. Rep.* **16**, 1000318 (2026).

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