

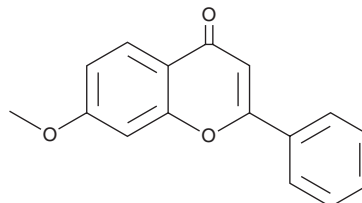
PRODUCT INFORMATION



7-Methoxyflavone

Item No. 33497

CAS Registry No.: 22395-22-8
Formal Name: 7-methoxy-2-phenyl-4H-1-benzopyran-4-one
MF: C₁₆H₁₂O₃
FW: 252.3
Purity: ≥98%
UV/Vis.: λ_{max}: 252, 308 nm
Supplied as: A crystalline 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

7-Methoxyflavone is supplied as a crystalline solid. A stock solution may be made by dissolving the 7-methoxyflavone in the solvent of choice, which should be purged with an inert gas. 7-Methoxyflavone is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide. The solubility of 7-methoxyflavone in these solvents is approximately 5, 15, and 30 mg/ml, respectively.

Description

7-Methoxyflavone is a flavone that has been found in *Z. brasiliensis* and has diverse biological activities.¹⁻⁴ It inhibits aromatase (IC₅₀ = 1.9 μM in a cell-free assay) and LPS-induced nitric oxide (NO) production by 17.74% in RAW 264.7 macrophages when used at a concentration of 20 μM.^{1,2} 7-Methoxyflavone activates androgen and/or glucocorticoid receptor transcriptional activity in a reporter assay and has antinociceptive effects in the acetic acid-induced writhing test in mice (ED₅₀ = 82.5 μmol/kg).^{3,4}

References

1. Ta, N. and Walle, T. Aromatase inhibition by bioavailable methylated flavones. *J. Steroid. Biochem. Mol. Biol.* **107(1-2)**, 127-129 (2007).
2. An, J.-Y., Lee, H.-H., Shin, J.-S., *et al.* Identification and structure activity relationship of novel flavone derivatives that inhibit the production of nitric oxide and PGE₂ in LPS-induced RAW 264.7 cells. *Bioorg. Med. Chem. Lett.* **27(11)**, 2613-2616 (2017).
3. Nishizaki, Y., Ishimoto, Y., Hotta, Y., *et al.* Effect of flavonoids on androgen and glucocorticoid receptors based on in vitro reporter gene assay. *Bioorg. Med. Chem. Lett.* **19(16)**, 4706-4710 (2009).
4. da Silva, A.D.S., Cavalcante-Silva, L.H.A., da Matta, C.B.B., *et al.* Antinociceptive effect of 7-methoxyflavone isolated from *Zornia brasiliensis*. *Nat. Prod. Res.* **27(18)**, 1695-1699 (2013).

WARNING

THIS PRODUCT IS FOR RESEARCH ONLY - NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

SAFETY DATA

This material should be considered hazardous until further information becomes available. Do not ingest, inhale, get in eyes, on skin, or on clothing. Wash thoroughly after handling. Before use, the user must review the complete Safety Data Sheet, which has been sent via email to your institution.

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