

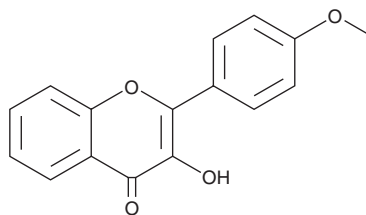
PRODUCT INFORMATION



4'-Methoxyflavonol

Item No. 42424

CAS Registry No.: 6889-78-7
Formal Name: 3-hydroxy-2-(4-methoxyphenyl)-4H-1-benzopyran-4-one
Synonym: NSC 102030
MF: C₁₆H₁₂O₄
FW: 268.3
Purity: ≥95%
Supplied as: A solid
Storage: -20°C
Stability: ≥4 years



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

Laboratory Procedures

4'-Methoxyflavonol is supplied as a solid. A stock solution may be made by dissolving the 4'-methoxyflavonol in the solvent of choice, which should be purged with an inert gas. 4'-Methoxyflavonol is sparingly soluble (1-10 mg/ml) in DMSO.

Description

4'-Methoxyflavonol is a synthetic flavonoid.^{1,2} It scavenges DPPH (Item No. 14805) radicals in a cell-free assay (IC₅₀ = 25.54 µg/ml).¹ 4'-Methoxyflavonol decreases androgen receptor levels in 22Rv1 prostate cancer cells when used at a concentration of 20 µM and inhibits the proliferation of the same cells (IC₅₀ = 30.5 µM).² *In vivo*, 4'-methoxyflavonol (10 mg/kg) inhibits acetic acid-induced writhing and decreases immobility time in the forced swim test in mice.¹ It reduces restraint stress-induced increases in adrenal gland weight, blood glucose, triglyceride, and total cholesterol levels, and brain thiobarbituric acid reactive substance (TBARS) levels and increases restraint stress-induced decreases in spleen and brain weight and brain catalase and superoxide dismutase (SOD) levels in mice when administered at a dose of 10 mg/kg.

References

1. Ghias, M., Shah, S.W.A., Al-Joufi, F.A., *et al.* In vivo antistress effects of synthetic flavonoids in mice: Behavioral and biochemical approach. *Molecules* **27**(4), 1402 (2022).
2. Britton, R.G., Horner-Glister, E., Pomenya, O.A., *et al.* Synthesis and biological evaluation of novel flavonols as potential anti-prostate cancer agents. *Eur. J. Med. Chem.* **54**, 952-958 (2012).

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.

WARRANTY AND LIMITATION OF REMEDY

Buyer agrees to purchase the material subject to Cayman's Terms and Conditions. Complete Terms and Conditions including Warranty and Limitation of Liability information can be found on our website.

Copyright Cayman Chemical Company, 12/11/2024

CAYMAN CHEMICAL

1180 EAST ELLSWORTH RD
ANN ARBOR, MI 48108 · USA

PHONE: [800] 364-9897
[734] 971-3335

FAX: [734] 971-3640

CUSTSERV@CAYMANCHEM.COM
WWW.CAYMANCHEM.COM