

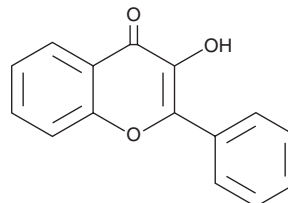
PRODUCT INFORMATION



3-Hydroxyflavone

Item No. 35333

CAS Registry No.: 577-85-5
Formal Name: 3-hydroxy-2-phenyl-4H-1-benzopyran-4-one
Synonyms: Flavon-3-ol, Flavonol, NSC 57653, NSC 58585, NSC 58586, NSC 58587
MF: C₁₅H₁₀O₃
FW: 238.2
Purity: ≥98%
UV/Vis.: λ_{max}: 239, 306, 344 nm
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

3-Hydroxyflavone is supplied as a solid. A stock solution may be made by dissolving the 3-hydroxyflavone in the solvent of choice, which should be purged with an inert gas. 3-Hydroxyflavone is soluble in the organic solvent DMSO at a concentration of approximately 1 mg/ml.

Description

3-Hydroxyflavone is a synthetic flavonol.¹ It reduces nicotine-induced cytotoxicity and production of reactive oxygen species (ROS) in NRK-52E cells when used at a concentration of 20 μM. 3-Hydroxyflavone (30 and 50 μM) inhibits the motility of U2OS, and the invasiveness of 143B, osteosarcoma cells.² It reduces tumor growth in a 143B mouse xenograft model when administered at doses of 10 and 20 mg/kg and reduces the formation of pulmonary metastases in a 143B mouse model of metastasis at 20 mg/kg. 3-Hydroxyflavone also reduces acetic acid-induced writhing in mice (ED₅₀ = 55 mg/kg).³

References

1. Sengupta, B., Sahihi, M., Dehkhodaei, M., *et al.* Differential roles of 3-hydroxyflavone and 7-hydroxyflavone against nicotine-induced oxidative stress in rat renal proximal tubule cells. *PLoS One* **12**(6), e0179777 (2014).
2. Lu, K.-H., Chen, P.-N., Hsieh, Y.-H., *et al.* 3-Hydroxyflavone inhibits human osteosarcoma U2OS and 143B cells metastasis by affecting EMT and repressing u-PA/MMP-2 via FAK-Src to MEK/ERK and RhoA/MLC2 pathways and reduces 143B tumor growth *in vivo*. *Food Chem. Toxicol.* **97**, 177-186 (2016).
3. Thirugnanasambantham, P., Viswanathan, S., Mythirayee, C., *et al.* Analgesic activity of certain flavone derivatives: A structure-activity study. *J. Ethnopharmacol.* **28**(2), 207-214 (1990).

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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