

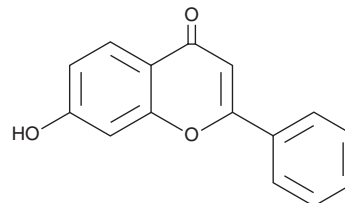
PRODUCT INFORMATION



7-Hydroxyflavone

Item No. 36071

CAS Registry No.: 6665-86-7
Formal Name: 7-hydroxy-2-phenyl-4H-1-benzopyran-4-one
Synonyms: NSC 94258, 7-hydroxy-2-Phenylchromone
MF: $C_{15}H_{10}O_3$
FW: 238.2
Purity: $\geq 95\%$
UV/Vis.: λ_{max} : 249, 308 nm
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

7-Hydroxyflavone is supplied as a solid. A stock solution may be made by dissolving the 7-hydroxyflavone in the solvent of choice, which should be purged with an inert gas. 7-Hydroxyflavone is soluble in organic solvents such as DMSO and dimethyl formamide. The solubility of 7-hydroxyflavone in these solvents is approximately 10 mg/ml.

Description

7-Hydroxyflavone is a synthetic flavonoid that has diverse biological activities.¹⁻⁴ It inhibits enterovirus 71 (EV71) replication in infected RD cells ($EC_{50} = 19.95 \mu\text{M}$).¹ 7-Hydroxyflavone (20 μM) reduces nicotine-induced production of reactive oxygen species (ROS) and cytotoxicity in NRK-52E cells.² It inhibits LPS-induced production of nitric oxide (NO), prostaglandin E_2 (PGE_2 ; Item No. 14010), TNF- α , and IL-6 in RAW 264.7 cells.³ In vivo, 7-hydroxyflavone reduces acetic acid-induced writhing in mice ($ED_{50} = 125 \text{ mg/kg}$).⁴

References

1. Wang, J., Su, H., Zhang, T., et al. Inhibition of enterovirus 71 replication by 7-hydroxyflavone and diisopropyl-flavon-7-yl phosphate. *PLoS One* **9**(3), e92565 (2014).
2. 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).
3. Jin, Z., Yang, Y.-Z., Chen, J.-X., et al. Inhibition of pro-inflammatory mediators in RAW264.7 cells by 7-hydroxyflavone and 7,8-dihydroxyflavone. *J. Pharm. Pharmacol.* **69**(7), 865-874 (2017).
4. 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.

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, 02/10/2023

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