

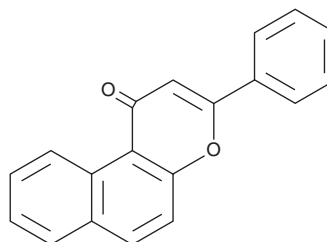
PRODUCT INFORMATION



β -Naphthoflavone

Item No. 34040

CAS Registry No.: 6051-87-2
Formal Name: 3-phenyl-1H-naphtho[2,1-b]pyran-1-one
Synonyms: BNF, 5,6-Benzoflavone, NSC 136015
MF: C₁₉H₁₂O₂
FW: 272.3
Purity: \geq 98%
UV/Vis.: λ_{\max} : 213, 275, 315 nm
Supplied as: A solid
Storage: -20°C
Stability: \geq 4 years



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

Laboratory Procedures

β -Naphthoflavone is supplied as a solid. A stock solution may be made by dissolving the β -naphthoflavone in the solvent of choice, which should be purged with an inert gas. β -Naphthoflavone is soluble in the organic solvent chloroform at a concentration of approximately 10 mg/ml. β -Naphthoflavone is slightly soluble in DMSO.

Description

β -Naphthoflavone is a non-carcinogenic agonist of the aryl hydrocarbon receptor (AhR).¹ It activates transcription of the AhR target gene CYP1A1 when used at concentrations of 1 and 10 μ M in HepG2 cells.¹ β -Naphthoflavone (10 μ M) inhibits hydrogen peroxide-induced apoptosis, as well as increases the activity of catalase (CAT) and superoxide dismutase (SOD) and decreases the levels of malondialdehyde (MDA), in SH-SY5Y cells.² It has also been used as a positive control for the induction of AhR transcriptional activity.¹

References

1. Ishida, T. and Takechi, S. β -Naphthoflavone, an exogenous ligand of aryl hydrocarbon receptor, disrupts zinc homeostasis in human hepatoma HepG2 cells. *J. Toxicol. Sci.* **44(10)**, 711-720 (2019).
2. Zhu, Y., Bi, F., Li, Y., *et al.* α - and β -Naphthoflavone synergistically attenuate H₂O₂-induced neuron SH-SY5Y cell damage. *Exp. Ther. Med.* **13(3)**, 1143-1150 (2017).

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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