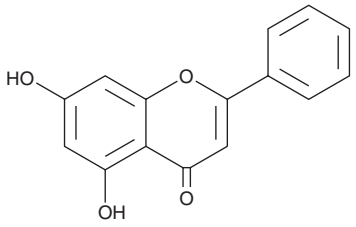
PRODUCT INFORMATION

Chrysin

Item No. 17402

CAS Registry No.: 480-40-0
Formal Name: 5,7-dihydroxy-2-phenyl-4H-1-benzopyran-4-one
Synonyms: 5,7-DHF, 5,7-Dihydroxyflavone, NSC 407436
MF: $C_{15}H_{10}O_4$
FW: 254.2
Purity: ≥95%
UV/Vis.: λ_{max}: 212, 269, 315 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

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

Description

Chrysin is a natural flavonoid with antioxidant, anti-inflammatory, and anticancer properties. It blocks COX-2 gene expression, PGE2 production, and hydroxyl radical formation in LPS-induced RAW 264.7 cells.[1,2] Chrysin inhibits insulin-induced HIF-1α expression (~50% at 10 µM) in human prostate cancer DU145 cells and blocks DU145 xenograft-induced angiogenesis *in vivo*.[3] In a mouse model of ischemia/reperfusion injury, chrysin decreased pro-inflammatory gene expression and oxidative stress, resulting in a reduction of infarct volume and neurological defects.[4]

References

1. Woo, K.J., Jeong, Y.J., Inoue, H., *et al.* Chrysin suppresses lipopolysaccharide-induced cyclooxygenase-2 expression through the inhibition of nuclear factor for IL-6 (NF-IL6) DNA-binding activity. *FEBS Letters* **579(3)**, 705-711 (2005).
2. Harris, G.K., Qian, Y., Leonard, S.S., *et al.* Luteolin and chrysin differentially inhibit cyclooxygenase-2 expression and scavenge reactive oxygen species but similarly inhibit prostaglandin-E2 formation in RAW 264.7 cells. *J. Nutr.* **136(6)**, 1517-1521 (2006).
3. Fu, B., Xue, J., Li, Z., *et al.* Chrysin inhibits expression of hypoxia-inducible factor-1α through reducing hypoxia-inducible factor-1α stability and inhibiting its protein synthesis. *Mol. Cancer Ther.* **6(1)**, 220-226 (2007).
4. Yao, Y., Chen, L., Xiao, J., *et al.* Chrysin protects against focal cerebral ischemia/reperfusion injury in mice through attenuation of oxidative stress and inflammation. *Int. J. Mol. Sci.* **15(11)**, 20913-20926 (2014).

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