

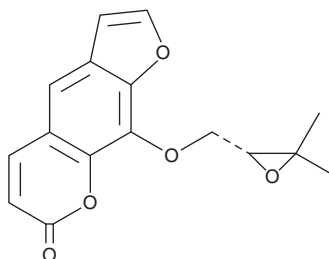
PRODUCT INFORMATION



Heraclenin

Item No. 39146

CAS Registry No.: 2880-49-1
Formal Name: 9-[[[(2R)-3,3-dimethyl-2-oxiranyl]methoxy]-7H-furo[3,2-g][1]benzopyran-7-one
Synonyms: (+)-Heraclenin, Prangenin
MF: C₁₆H₁₄O₅
FW: 286.3
Purity: ≥98%
Supplied as: A solid
Storage: -20°C
Stability: ≥4 years
Item Origin: Plant/*Angelica pubescentis* radix



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

Laboratory Procedures

Heraclenin is supplied as a solid. A stock solution may be made by dissolving the heraclenin in the solvent of choice, which should be purged with an inert gas. Heraclenin is soluble in acetonitrile and DMSO.

Description

Heraclenin is a furanocoumarin epoxide that has been found in *A. marmelos* and has diverse biological activities.¹⁻³ It is active against *P. falciparum* (IC₅₀s = 2.85 and 6 µg/ml for chloroquine-sensitive and -resistant strains, respectively).¹ It is also active against the bacteria *B. subtilis*, *B. sphaericus*, *S. aureus*, *E. coli*, and *C. violaceum*, as well as the fungi *A. niger*, *A. flavus*, *C. albicans*, and *S. cerevisiae* in a disc assay when used at a concentration of 100 µg/disc. Heraclenin (5, 10, and 20 µM) enhances osteoblastic differentiation and mineralization of primary mouse mesenchymal stem cells (mMSCs).² *In vivo*, heraclenin (0.1-1 mg/kg) reduces ear edema in a mouse model of inflammation induced by phorbol 12-myristate 13-acetate (TPA; Item No. 10008014).³

References

1. Gowri, P.M., Haribabu, K., Kishore, H., et al. Microbial transformation of (+)-heraclenin by *Aspergillus niger* and evaluation of its antiplasmodial and antimicrobial activities. *Curr. Sci.* **100(11)**, 1706-1711 (2011).
2. Shanmugam, H., Dharun, V.N., Biswal, B.K., et al. Osteogenic stimulatory effect of heraclenin purified from bael in mouse mesenchymal stem cells *in vitro*. *Chem. Biol. Interact.* **310**, 108750 (2019).
3. García-Argáez, A.N., Ramírez Apan, T.O., Parra Delgado, H., et al. Anti-inflammatory activity of coumarins from *Decatropis bicolor* on TPA ear mice model. *Planta Med.* **66(3)**, 279-281 (2000).

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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