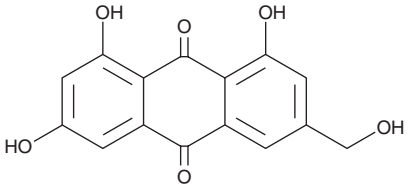
PRODUCT INFORMATION

Citreorosein

Item No. 43199

CAS Registry No.: 481-73-2
Formal Name: 1,3,8-trihydroxy-6-(hydroxymethyl)-9,10-anthracenedione
Synonyms: ω-Hydroxyemodin, NSC 624612
MF: $C_{15}H_{10}O_6$
FW: 286.2
Purity: ≥98%
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

Citreorosein is supplied as a solid. A stock solution may be made by dissolving the citreorosein in the solvent of choice, which should be purged with an inert gas. Citreorosein is slightly soluble (0.1-1 mg/ml) in acetonitrile and methanol.

Description

Citreorosein is a polyketide anthraquinone that has been found in *P. herquei* and has antibacterial and anti-inflammatory activities.[1-3] It is active against *E. coli* when used at concentrations ranging from 31.25 to 500 µg/ml, against *P. aeruginosa* from 62.5 to 500 µg/ml, and against *B. subtilis* at 250 and 500 µg/ml.[1] Citreorosein (25 µg/ml) reduces LPS-induced nitric oxide (NO) production and LPS-induced increases in TNF-α and IL-6 levels in RAW 264.7 cells.[2] It reduces the production of prostaglandin D_2 (PGD_2; Item No. 12010) and the levels of COX-2 in primary mouse bone marrow-derived mast cells (BMMCs) stimulated with stem cell factor (SCF), IL-10, and LPS when used at concentrations of 10 and 20 µM.[3] Citreorosein (10 and 20 µM) also inhibits SCF-, IL-10-, and LPS-induced increases in the nuclear translocation of NF-κB p65 in primary mouse BMMCs.

References

1. Marinho, A.M., Marinho, P.S., Santos, L.S., *et al.* Active polyketides isolated from *Penicillium herquei*. *An. Acad. Bras. Cienc.* **85(3),** 909-912 (2013).
2. Xie, Z., Fan, X., Sallam, A.S., *et al.* Extraction, isolation, identification and bioactivity of anthraquinones from *Aspergillus cristatus* derived from Fuzhaun brick tea. *Food Chem.* **474,** 143104 (2025).
3. Lu, Y., Suh, S.-J., Li, X., *et al.* Citreorosein, a naturally occurring anthraquinone derivative isolated from *Polygoni cuspidati* radix, attenuates cyclooxygenase-2-dependent prostaglandin D_2 generation by blocking Akt and JNK pathways in mouse bone marrow-derived mast cells. *Food Chem. Toxicol.* **50(3-4),** 913-919 (2012).

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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