# PRODUCT INFORMATION



## Chrysosplenetin

Item No. 30625

CAS Registry No.: 603-56-5

Formal Name: 5-hydroxy-2-(4-hydroxy-3-

methoxyphenyl)-3,6,7-trimethoxy-

4H-1-benzopyran-4-one

Chrysosplenol B, Chrysosptertin B, Synonyms:

EMD 20940, Polycladin

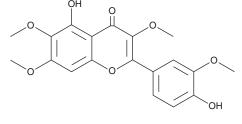
MF:  $C_{19}H_{18}O_{8}$ FW: 374.3 **Purity:** ≥98%

 $\lambda_{max}$ : 257, 271, 350 nm UV/Vis.: A crystalline solid Supplied as:

-20°C Storage: Stability: ≥4 years

Item Origin: Plant/Laggera pterodonta

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



## **Laboratory Procedures**

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

#### Description

Chrysosplenetin is a flavonoid that has been found in A. annua and has diverse biological activities. 1-3 It is active against *P. falciparum in vitro* ( $IC_{50}$  = 23  $\mu$ M).<sup>1</sup> Chrysosplenetin inhibits the cytopathic effect of enterovirus 71 (EV71) in Vero cells (EC<sub>50</sub> = 0.68  $\mu$ M) and increases survival in a neonatal mouse model of EV71 infection when administered at doses of 1 and 5 mg/kg.<sup>2</sup> It also increases proliferation and osteogenic differentiation of isolated human bone marrow stromal cells (BMSCs) and prevents estrogen deficiency-induced bone loss in ovariectomized mice.3

#### References

- 1. Liu, K.C., Yang, S.L., Roberts, M.F., et al. Antimalarial activity of Artemisia annua flavonoids from whole plants and cell cultures. Plant Cell Rep. 11(12), 637-640 (1992).
- 2. Dai, W., Bi, J., Li, F., et al. Antiviral efficacy of flavonoids against enterovirus 71 infection in vitro and in newborn mice. Viruses 11(7), 625 (2019).
- 3. Hong, G., He, X., Shen, Y., et al. Chrysosplenetin promotes osteoblastogenesis of bone marrow stromal cells via Wnt/β-catenin pathway and enhances osteogenesis in estrogen deficiency-induced bone loss. Stem Cell Res. Ther. 10(1), 277 (2019).

WARNING
THIS PRODUCT IS FOR RESEARCH ONLY - NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

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

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### **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