

# PRODUCT INFORMATION



## Isorhoifolin

Item No. 34036

**CAS Registry No.:** 552-57-8  
**Formal Name:** 7-[[6-O-(6-deoxy- $\alpha$ -L-mannopyranosyl)- $\beta$ -D-glucopyranosyl]oxy]-5-hydroxy-2-(4-hydroxyphenyl)-4H-1-benzopyran-4-one  
**Synonym:** Apigenin-7-O-rutinoside

**MF:**  $C_{27}H_{30}O_{14}$

**FW:** 578.5

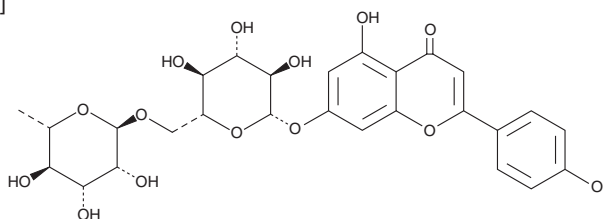
**Purity:**  $\geq 95\%$

**Supplied as:** A solid

**Storage:**  $-20^{\circ}\text{C}$

**Stability:**  $\geq 4$  years

**Item Origin:** Fruit/Citrus peel



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

### Laboratory Procedures

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

### Description

Isorhoifolin is a flavonoid glycoside and an aglycone form of apigenin (Item No. 10010275) that has been found in *M. longifolia* and has diverse biological activities.<sup>1-3</sup> It inhibits matrix metalloproteinase-1 (MMP-1), MMP-3, and MMP-13 ( $\text{IC}_{50}\text{s} = 0.33, 2.45, \text{ and } 0.22 \mu\text{M}$ , respectively).<sup>1</sup> Isorhoifolin has antimutagenic properties in the *E. coli* WP2 tryptophan reverse mutation assay when used at a concentration of  $2 \mu\text{M}$ .<sup>2</sup> It is active against *S. aureus* and *P. aeruginosa*, but not *E. coli* or *C. albicans*, in agar diffusion assays when used at a concentration of  $140 \mu\text{g/ml}$ .<sup>3</sup>

### References

1. Crasci, L., Basile, L., Panico, A., *et al.* Correlating *in vitro* target-oriented screening and docking: Inhibition of matrix metalloproteinases activities by flavonoids. *Planta Med.* **83**(11), 901-911 (2017).
2. Baris, O., Karadayi, M., Yanmis, D., *et al.* Isolation of 3 flavonoids from *Mentha longifolia* (L.) Hudson subsp. *longifolia* and determination of their genotoxic potentials by using the *E. coli* WP2 test system. *J. Food. Sci.* **76**(9), T212-T217 (2011).
3. Abu-Gharbieh, E., and Shehab, N.G. Therapeutic potentials of *Crataegus azarolus* var. eu-*azarolus* Maire leaves and its isolated compounds. *BMC Complement. Altern. Med.* **17**(1), 218 (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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#### 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