

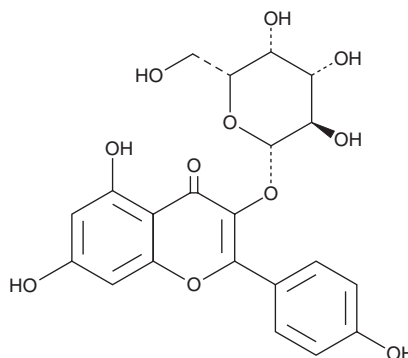
PRODUCT INFORMATION



Kaempferol 3-O-galactoside

Item No. 33747

CAS Registry No.: 23627-87-4
Formal Name: 3-(β-D-galactopyranosyloxy)-5,7-dihydroxy-2-(4-hydroxyphenyl)-4H-1-benzopyran-4-one
Synonym: Trifolin
MF: C₂₁H₂₀O₁₁
FW: 448.4
Purity: ≥98%
Supplied as: A solid
Storage: -20°C
Stability: ≥4 years
Item Origin: Plant/*Apocynum venetum*



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

Laboratory Procedures

Kaempferol 3-O-galactoside is supplied as a solid. A stock solution may be made by dissolving the kaempferol 3-O-galactoside in the solvent of choice, which should be purged with an inert gas. Kaempferol 3-O-galactoside is soluble in the organic solvent ethanol.

Description

Kaempferol 3-O-galactoside is a flavonoid that has been found in *C. vulgaris* and has diverse biological activities, including anticancer, antioxidant, and anti-inflammatory properties.¹⁻³ It inhibits secretory phospholipase A₂ (sPLA₂) with an IC₅₀ value of 17.6 μM.¹ Kaempferol 3-O-galactoside (12.5, 25, and 50 μM) decreases protein levels of Akt and induces apoptosis in NCI H460 non-small cell lung cancer (NSCLC) cells.² It scavenges DPPH (Item No. 14805) radicals and superoxide anions in cell-free assays when used at a concentration of 200 μg/ml.³ Kaempferol 3-O-galactoside reduces ear and paw edema induced by phorbol 12-myristate 13-acetate (TPA; Item No. 10008014) and carrageenan, respectively, in mice when administered at a dose of 150 mg/kg.¹

References

1. Gil, B., Sanz, M.J., Terencio, M.C., *et al.* Effects of flavonoids on *Naja naja* and human recombinant synovial phospholipases A₂ and inflammatory responses in mice. *Life Sci.* **54(20)**, PL333-PL338 (1994).
2. Kim, M.-J., Kwon, S.-B., Kim, M.-S., *et al.* Trifolin induces apoptosis via extrinsic and intrinsic pathways in the NCI-H460 human non-small cell lung-cancer cell line. *Phytomedicine* **23(10)**, 998-1004 (2016).
3. Deliorman-Orhan, D., Şenol, S., Kartal, M., *et al.* Assessment of antiradical potential of *Calluna vulgaris* (L.) Hull and its major flavonoid. *J. Sci. Fd. Agric.* **89(5)**, 809-814 (2009).

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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