PRODUCT INFORMATION



Kaempferitrin

Item No. 12093

CAS Registry No.: 482-38-2

Formal Name: 3,7-bis[(6-deoxy- α -L-mannopyranosyl)

oxy]-5-hydroxy-2-(4-hydroxyphenyl)-

4H-1-benzopyran-4-one

Synonyms: BRN 0073958, Grosvenorine II,

Kaempferol 3,7-O- α -Dirhamnoside,

Lespedin

MF: $C_{27}H_{30}O_{14}$ FW: 578.5 **Purity:** ≥98%

A crystalline solid Supplied as:

-20°C Storage: Stability: ≥4 years

Item Origin: Plant/Calendula officinalis

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

HO)

CH

ÓН

OH

ÓН

Laboratory Procedures

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

Description

Kaempferitrin is a flavonoid glycoside that has been found in B. pinnatum and has diverse biological activities. $^{1-3}$ It scavenges DPPH radicals (IC $_{50}$ = 8.73 μ g/ml) and is active against the bacteria S. aureus, P. aeruginosa, and S. typhi, as well as the fungi C. albicans, C. parapsilosis, and C. neoformans (MICs = 16-32 μg/ml). Kaempferitrin inhibits LPS-and IFN-γ-induced nitric oxide (NO) production in isolated mouse macrophages ($IC_{50} = 40 \mu M$).² It decreases blood glucose levels in a rat model of alloxan-induced diabetes when administered at a dose of 100 mg/kg.3

References

- 1. Tatsimo, S.J.N., Tamokou, J.d.D., Havyarimana, L., et al. Antimicrobial and antioxidant activity of kaempferol rhamnoside derivatives from Bryophyllum pinnatum. BMC Res. Notes 5, 158 (2012).
- 2. Fang, S.-H., Rao, Y.K., and Tzeng, Y.-M. Inhibitory effects of flavonol glycosides from Cinnamomum osmophloeum on inflammatory mediators in LPS/IFN-γ-activated murine macrophages. Bioorg. Med. Chem. 13(7), 2381-2388 (2005).
- 3. Jorge, A.P., Horst, H., de Sousa, E., et al. Insulinomimetic effects of kaempferitrin on glycaemia and on ¹⁴C-glucose uptake in rat soleus muscle. Chem. Biol. Interact. **149(2-3)**, 89-96 (2004).

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.

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