# PRODUCT INFORMATION



# **Schaftoside**

Synonym:

Item No. 27950

CAS Registry No.: 51938-32-0

Formal Name: 8-α-L-arabinopyranosyl-6-β-D-

> glucopyranosyl-5,7-dihydroxy-2-(4hydroxyphenyl)-4H-1-benzopyran-4-one

Apigenin 6-C-glucoside-8-C-arabinoside

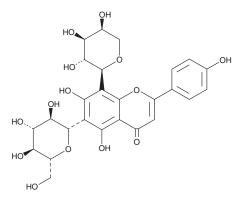
MF:  $C_{26}H_{28}O_{14}$ FW: 564.5 **Purity:** ≥98%

λ<sub>max</sub>: 217, 274, 335 nm UV/Vis.: Supplied as: A crystalline solid

-20°C Storage: Stability: ≥4 years

Item Origin: Plant/Desmodium styracifolium

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



## **Laboratory Procedures**

Schaftoside is supplied as a crystalline solid. A stock solution may be made by dissolving the schaftoside in the solvent of choice, which should be purged with an inert gas. Schaftoside is soluble in organic solvents such as DMSO and dimethyl formamide. The solubility of schaftoside in these solvents is approximately 30 and 20 mg/ml, respectively.

Schaftoside is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, schaftoside should first be dissolved in DMSO and then diluted with the aqueous buffer of choice. Schaftoside has a solubility of approximately 0.14 mg/ml in a 1:6 solution of DMSO:PBS (pH 7.2) using this method. We do not recommend storing the aqueous solution for more than one day.

#### Description

Schaftoside is a flavonoid C-glycoside that has been found in C. annum and has antioxidant and anti-inflammatory activities.  $^{1,2}$  It inhibits xanthine oxidase with an IC $_{50}$  value of 51.4  $\mu M$  and has antioxidant activity in a  $\beta$ -carotene-linoleic acid bleaching assay ( $I\tilde{C}_{50} = 46.3 \mu M$ ). Schaftoside (400 μg/kg) inhibits neutrophil influx into mouse lung by 62% in a model of airway inflammation induced by aerosol administration of LPS.2

#### References

- 1. Materska, M. Flavone C-glycosides from Capsicum annuum L.: Relationships between antioxidant activity and lipophilicity. Eur. Food Res. Technol. 240(3), 549-557 (2015).
- De Melo, G.O., Muzitano, M.F., Legora-Machado, A., et al. C-Glycosylflavones from the aerial parts of Eleusine indica inhibit LPS-induced mouse lung inflammation. Planta Med. 71(4), 362-363 (2005).

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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