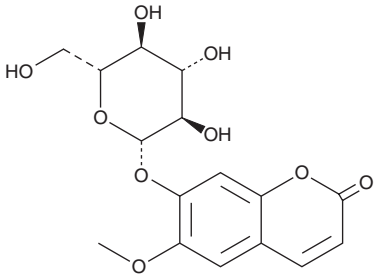
PRODUCT INFORMATION

Scopolin

Item No. 33874

CAS Registry No.:	531-44-2
Formal Name:	7-(β-D-glucopyranosyloxy)-6-methoxy-2H-1-benzopyran-2-one
Synonym:	NSC 404560
MF:	$C_{16}H_{18}O_9$
FW:	354.3
Purity:	≥98%
UV/Vis.:	λ_{max}: 228, 339 nm
Supplied as:	A solid
Storage:	-20°C
Stability:	≥4 years



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

Laboratory Procedures

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

Scopolin is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, scopolin should first be dissolved in DMF and then diluted with the aqueous buffer of choice. Scopolin has a solubility of approximately 0.20 mg/ml in a 1:4 solution of DMF:PBS (pH 7.2) using this method. We do not recommend storing the aqueous solution for more than one day.

Description

Scopolin is a coumarin glucoside form of scopoletin (Item No. 20042) that has been found in *O. africana* and has anti-inflammatory activity.[1-3] It decreases the production of prostaglandin E_2 (PGE_2; Item No. 14010) and leukotriene C_4 (LTC_4; Item No. 20210) induced by A23187 (Item No. 11016) in isolated mouse peritoneal macrophages when used at a concentration of 100 µM.[2] Scopolin (50 and 100 mg/kg) reduces synovial inflammation and fibrosis, as well as bone and cartilage erosion, in the inflamed joints in a rat model of rheumatoid arthritis induced by complete Freund's adjuvant and *M. butyricum*.[3]

References

1. Tsukamoto, H., Hisada, S., and Nishibe, S. Coumarin and secoiridoid glucosides from bark of *Olea africana* and *Olea capensis*. *Chem. Pharm. Bull.* **33(1)**, 396-399 (1984).
2. Silván, A.M., Abad, M.J., Bermejo, P., *et al.* Antiinflammatory activity of coumarins from *Santolina oblongifolia*. *J. Nat. Prod.* **59(12)**, 1183-1185 (1996).
3. Pan, R., Dai, Y., Gao, X., *et al.* Scopolin isolated from Benth stems suppresses adjuvant-induced rat arthritis by inhibiting inflammation and angiogenesis. *Int. Immunopharmacol.* **9(7-8)**, 859-869 (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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