

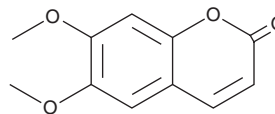
PRODUCT INFORMATION



Scoparone

Item No. 20046

CAS Registry No.: 120-08-1
Formal Name: 6,7-dimethoxy-2H-1-benzopyran-2-one
Synonyms: Aesculetin dimethyl ether,
6,7-Dimethoxycoumarin,
6,7-Dimethylesculetin, Escoparone
MF: C₁₁H₁₀O₄
FW: 206.2
Purity: ≥98%
UV/Vis.: λ_{max}: 230, 294, 343 nm
Supplied as: A crystalline 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

Scoparone is supplied as a crystalline solid. A stock solution may be made by dissolving the scoparone in the solvent of choice, which should be purged with an inert gas. Scoparone is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide (DMF). The solubility of scoparone in these solvents is approximately 1, 14, and 25 mg/ml, respectively.

Scoparone is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, scoparone should first be dissolved in DMF and then diluted with the aqueous buffer of choice. Scoparone has a solubility of approximately 0.25 mg/ml in a 1:3 solution of DMF:PBS (pH 7.2) using this method. We do not recommend storing the aqueous solution for more than one day.

Description

Scoparone is a coumarin that has been found in *A. capillaris* and has diverse biological activities.¹⁻⁵ It inhibits angiotensin II-induced extracellular matrix (ECM) remodeling and cell proliferation and reduces levels of collagen I and fibronectin in isolated primary neonatal rat cardiac fibroblasts when used at concentrations ranging from 1 to 10 μM.¹ Scoparone suppresses PDGF-BB-induced rat aortic smooth muscle cell (RASMC) migration and wound healing in a scratch assay.² *In vivo*, scoparone (3.5 mg/kg) reduces vascular neointima formation in a rat model of carotid artery balloon injury. Scoparone (80 mg/kg) reduces hepatocyte apoptosis, liver fibrosis, serum levels of alanine aminotransferase (ALT) and aspartate aminotransferase (AST), and hepatic triglyceride levels in a mouse model of non-alcoholic steatohepatitis (NASH) induced by a methionine- and choline-deficient (MCD) diet.³ It reduces ulcer lesion area in a rat model of HCl- and ethanol-induced gastric ulcers.⁴ Scoparone also inhibits passive cutaneous anaphylaxis in rats.⁵

References

1. Fu, B., Su, Y., Ma, X., et al. *J. Pharmacol. Sci.* **137**(2), 110-115 (2018).
2. Jung, S.H., Lee, G.B., Ryu, Y., et al. *J. Sci. Food Agric.* **99**(9), 4397-4406 (2019).
3. Liu, B., Deng, X., Jiang, Q., et al. *Int. Immunopharmacol.* **75**, 105797 (2019).
4. Son, D.J., Lee, G.R., Oh, S., et al. *Nutrients* **7**(3), 1945-1964 (2015).
5. Choi, Y.H. and Yan, G.H. *Phytomedicine* **16**(12), 1089-1094 (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.

WARRANTY AND LIMITATION OF REMEDY

Buyer agrees to purchase the material subject to Cayman's Terms and Conditions. Complete Terms and Conditions including Warranty and Limitation of Liability information can be found on our website.

Copyright Cayman Chemical Company, 10/24/2022

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