

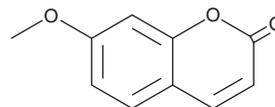
PRODUCT INFORMATION



7-Methoxycoumarin

Item No. 30857

CAS Registry No.: 531-59-9
Formal Name: 7-methoxy-2H-1-benzopyran-2-one
Synonyms: Ayapanin, Gerniarin, Herniarin, Methylumbelliferone, NSC 404559
MF: C₁₀H₈O₃
FW: 176.2
Purity: ≥98%
UV/Vis.: λ_{max}: 217, 323 nm
Supplied as: A solid
Storage: -20°C
Stability: ≥4 years
Item Origin: Synthetic



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

Laboratory Procedures

7-Methoxycoumarin is supplied as a solid. A stock solution may be made by dissolving the 7-methoxycoumarin in the solvent of choice, which should be purged with an inert gas. 7-Methoxycoumarin is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide (DMF). The solubility of 7-methoxycoumarin in ethanol is approximately 5 mg/ml and approximately 10 mg/ml in DMSO and DMF.

7-Methoxycoumarin is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, 7-methoxycoumarin should first be dissolved in DMSO and then diluted with the aqueous buffer of choice. 7-Methoxycoumarin has a solubility of approximately 0.2 mg/ml in a 1:4 solution of DMSO:PBS (pH 7.2) using this method. We do not recommend storing the aqueous solution for more than one day.

Description

7-Methoxycoumarin is a coumarin that has been found in *S. oblongifolia* and has diverse biological activities.¹⁻³ It reduces the release of prostaglandin E₂ (PGE₂; Item No. 14010) and leukotriene C₄ (LTC₄; Item No. 20210) induced by A23187 (Item No. 110160) in isolated mouse peritoneal macrophages.¹ 7-Methoxycoumarin is active against *S. aureus*, *S. epidermidis*, *B. subtilis*, *S. lutea*, and *V. cholera* (MICs = 0.5, 0.75, 0.75, 0.75, and 0.5 mg/ml, respectively).² *In vivo*, 7-methoxycoumarin (3.5 and 7 mg/kg) reduces formalin-induced paw licking and biting responses in mice.³

References

1. 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).
2. Canales-Martínez, M., Hernández-Delgado, T., Flores-Ortiz, C., et al. Antimicrobial activity of *Alternanthera caracasana*. *Pharm. Biol.* **43**(4), 305-307 (2005).
3. Cheriyan, B.V., Sr., Kadhivelu, P., Sr., Nadipelly, J., Jr., et al. Anti-nociceptive effect of 7-methoxy coumarin from *Eupatorium triplinerve vahl* (Asteraceae). *Pharmacogn. Mag.* **13**(49), 81-84 (2017).

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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