

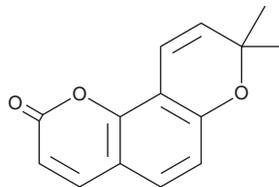
PRODUCT INFORMATION



Seselin

Item No. 29930

CAS Registry No.: 523-59-1
Formal Name: 8,8-dimethyl-2H,8H-benzo[1,2-b:3,4-b']dipyran-2-one
MF: C₁₄H₁₂O₃
FW: 228.2
Purity: ≥95%
Supplied as: A solid
Storage: -20°C
Stability: ≥4 years
Item Origin: Plant/*Correa reflexa*



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

Laboratory Procedures

Seselin is supplied as a solid. A stock solution may be made by dissolving the seselin in the solvent of choice, which should be purged with an inert gas. Seselin is soluble in organic solvents such as ethanol, methanol, DMSO, and dimethyl formamide.

Description

Seselin is an angular pyranocoumarin that has been found in *M. semecarpifolia* and has diverse biological activities.¹⁻⁴ It is cytotoxic to P388 and HT-29 cells *in vitro* (EC₅₀s = 8.66 and 9.94 μg/ml).¹ Seselin (0.5, 4.5, and 40.5 mg/kg) reduces acetic acid-induced writhing in mice.² It also reduces paw licking in the first and second phases of the formalin test in mice when administered 30 minutes prior to formalin. Seselin (3, 10, and 30 mg/kg) decreases serum levels of IL-1β, IL-6, and TNF-α in a mouse model of sepsis induced by cecal ligation and puncture and increases survival when administered at a dose of 30 mg/kg.³ It reduces ear edema induced by phorbol 12-myristate 13-acetate (TPA; Item No. 10008014) in mice (ED₄₅ = 0.25 mg/ear).⁴

References

1. Chou, H.-C., Chen, J.-J., Duh, C.-Y., *et al.* Cytotoxic and anti-platelet aggregation constituents from the root wood of *Melicope semecarpifolia*. *Planta Med.* **71(11)**, 1078-1081 (2005).
2. Lima, V., Silva, C.B., Mafezoli, J., *et al.* Antinociceptive activity of the pyranocoumarin seselin in mice. *Fitoterapia* **77(7-8)**, 574-578 (2006).
3. Feng, L., Sun, Y., Song, P., *et al.* Seselin ameliorates inflammation via targeting Jak2 to suppress the proinflammatory phenotype of macrophages. *Br. J. Pharmacol.* **176(2)**, 317-333 (2019).
4. García-Argáez, A.N., Ramírez Apan, T.O., Parra Delgado, H., *et al.* Anti-inflammatory activity of coumarins from *Decatropis bicolor* on TPA ear mice model. *Planta Med.* **66(3)**, 279-281 (2000).

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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