

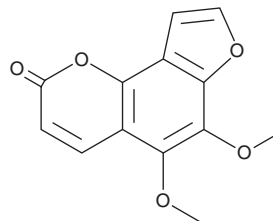
# PRODUCT INFORMATION



## Pimpinellin

Item No. 36274

CAS Registry No.: 131-12-4  
Formal Name: 5,6-dimethoxy-2H-furo[2,3-h]-1-benzopyran-2-one  
MF:  $C_{13}H_{10}O_5$   
FW: 246.2  
Purity:  $\geq 98\%$   
UV/Vis.:  $\lambda_{max}$ : 223, 242, 249, 272, 313 nm  
Supplied as: A solid  
Storage:  $-20^{\circ}\text{C}$   
Stability:  $\geq 4$  years  
Item Origin: Plant/*Psoralea corylifolia*



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

### Laboratory Procedures

Pimpinellin is supplied as a solid. A stock solution may be made by dissolving the pimpinellin in the solvent of choice, which should be purged with an inert gas. Pimpinellin is soluble in organic solvents such as DMSO and dimethyl formamide. The solubility of pimpinellin in these solvents is approximately 5 and 30 mg/ml, respectively.

### Description

Pimpinellin is a coumarin derivative that has been found in *L. dasyanthus* and has diverse biological activities.<sup>1-3</sup> It inhibits acetylcholinesterase (AChE) and butyrylcholinesterase (BChE) by 23.54 and 66.55%, respectively, when used at a concentration of 20  $\mu\text{g/ml}$ .<sup>1</sup> Pimpinellin (40 mg/kg) inhibits collagen-induced aggregation of mouse platelets *ex vivo*.<sup>2</sup> It inhibits seizure-like behavior induced by pentylenetetrazole (PTZ; Item No. 18682) in zebrafish larvae.<sup>3</sup>

### References

1. Karakaya, S., Koca, M., Sytar, O., *et al.* The natural phenolic compounds and their antioxidant and anticholinesterase potential of herb *Leiotulus dasyanthus* (K. Koch) Pimenov & Ostr. *Nat. Prod. Res.* **34(9)**, 1303-1305 (2020).
2. Liu, G., Yuan, Z., Tian, X., *et al.* Pimpinellin inhibits collagen-induced platelet aggregation and activation through inhibiting granule secretion and PI3K/Akt pathway. *Front. Pharmacol.* **12**, 706363 (2021).
3. Koziół, E., Józwiak, K., Budzyńska, B., *et al.* Comparative antiseizure analysis of diverse natural coumarin derivatives in zebrafish. *Int. J. Mol. Sci.* **22(21)**, 11420 (2021).

#### 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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