

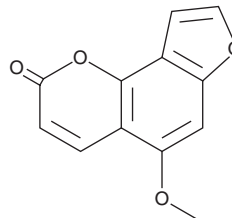
# PRODUCT INFORMATION



## Isobergapten

Item No. 34141

CAS Registry No.: 482-48-4  
Formal Name: 5-methoxy-2H-furo[2,3-h]-1-benzopyran-2-one  
Synonym: 5-methoxy Angelicin  
MF:  $C_{12}H_8O_4$   
FW: 216.2  
Purity:  $\geq 98\%$   
UV/Vis.:  $\lambda_{max}$ : 223, 251, 267, 311 nm  
Supplied as: A solid  
Storage:  $-20^{\circ}\text{C}$   
Stability:  $\geq 4$  years  
Item Origin: Plant/*Angelica dahurica*



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

### Laboratory Procedures

Isobergapten is supplied as a solid. A stock solution may be made by dissolving the isobergapten in the solvent of choice, which should be purged with an inert gas. Isobergapten is soluble in DMSO

### Description

Isobergapten is a furanocoumarin that has been found in *H. persicum* and has diverse biological activities.<sup>1-3</sup> It inhibits  $\alpha$ -glucosidase and scavenges DPPH (Item No. 14805) radicals in cell-free assays ( $IC_{50}$ s = 0.385 and 28.6  $\mu\text{M}$ , respectively).<sup>1</sup> Isobergapten is active against *S. aureus*, *B. cereus*, *P. aeruginosa*, and *S. enteritidis* (MICs = 125  $\mu\text{g/ml}$  for all).<sup>2</sup> It reduces tumor growth in a B16/F10 murine melanoma model when administered at a dose of 0.5 mg/kg in combination with ultraviolet A (UVA) radiation.<sup>3</sup>

### References

1. Dehghan, H., Sarrafi, Y., Salehi, P., et al.  $\alpha$ -Glucosidase inhibitory and antioxidant activity of furanocoumarins from *Heracleum persicum*. *Med. Chem. Res.* **26**, 849-855 (2017).
2. Dehghan, H., Rezaee, P., and Aliahmadi, A. Bioassay screening of 12 Iranian plants and detection of antibacterial compounds from *Heracleum persicum* using a TLC bioautography method. *J. Liq. Chromatogr. R. T.* **43**, 381-387 (2020).
3. Sumiyoshi, M., Sakanaka, M., Taniguchi, M., et al. Anti-tumor effects of various furocoumarins isolated from the roots, seeds and fruits of *Angelica* and *Cnidium* species under ultraviolet A irradiation. *J. Nat. Med.* **68**(1), 83-94 (2014).

#### 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

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