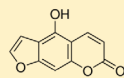


# FUROCOUMARINS AND FURANOCOUMARINS

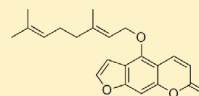


GRAPEFRUIT

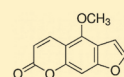
## FURANOCOUMARINS



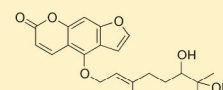
Bergaptol



Bergamottin



Bergapten



6'7'-Dihydroxybergamottin

ANTIOXIDATION

ANTIINFLAMMATION

ANTIPROLIFERATION

BONE HEALTH  
ENHANCEMENT

## Fast Facts

- Found in many citrus fruits including: grapefruits, lemons, and limes
- Distinct five-membered ring structure attached to coumarin
- Some act as defense mechanisms against fungi, bacteria, and insects due to toxicity<sup>1</sup>

Check out ChromaDex's best-selling chemical reference standards in the Furocoumarin/ Furanocoumarin chemical family.

Description	Part Number
CIMIFUGIN(P)	<a href="#">00003639</a>
BERGAPTEN(P)	<a href="#">00002215</a>
OXYPEUCEDANIN(P)	<a href="#">00015490</a>
BYAKANGELICOL(P)	<a href="#">00002533</a>
BERGAMOTTIN(P)	<a href="#">00002210</a>

To see more Furanocoumarin reference standards, take a look at our extensive catalog at: <https://standards.chromadex.com/collections/all>



## Biological Activities

- **Antioxidant** properties found in precursors of bergamottin that possess free radical scavenging abilities<sup>2</sup>
- Studies have shown to support apoptosis of targeted cells<sup>3</sup>
- *Grapefruit Juice Effect*: adverse medication reactions by interfering with liver and intestinal enzymes<sup>4</sup>

**GET RELIABLE RESULTS: PLACE YOUR ORDER TODAY!** +1 (949) 419-0288 | [Sales@ChromaDex.com](mailto:Sales@ChromaDex.com)

## References

1. Bourgaud, F., Hehn, A., Larbat, R., Doerper, S., Gontier, E., Kellner, S., Matern, U., Biosynthesis of coumarins in plants: a major pathway still to be unravelled for cytochrome P450 enzymes. *Phytochem Rev*, 2006. 5: p. 293-308.
2. Y. Bai, D. Li, T. Zhou, N. Qin, Z. Li, Z. Yu, H. Hua Coumarins from the roots of *Angelica dahurica* with antioxidant and antiproliferative activities. *J Funct Foods*, 20 (2016), pp. 453-462.
3. Kim, S. M., J. H. Lee, G. Sethi, C. Kim, S. H. Baek, D. Nam, W. S. Chung, S-H Kim, B. S. Shim, and K. S. Ahn. 2014. "Bergamottin, a natural furanocoumarin obtained from grapefruit juice induces chemosensitization and apoptosis through the inhibition of STAT3 signaling pathway in tumor cells." *Cancer Lett.* 354(1): 153 163.
4. Hung, W.L., J.H. Suh, and Y. Wang, Chemistry and health effects of furanocoumarins in grapefruit. *J Food Drug Anal*, 2017. 25(1): p. 71-83.