



LKT Laboratories, Inc.

Carnosol

Phone: 888-558-5227
651-644-8424
Fax: 888-558-7329
Email: getinfo@lktlabs.com
Web: lktlabs.com

Product Information

Product ID C0267

CAS No. 5957-80-2

Chemical Name 2H-9,4a-(Epoxy-methano)phenanthren-12-one,1,3,4,9,110a-hexahydro-5,6-dihydroxy-1,1-dimethyl-7-(1-methylethyl)-, (4aR-(4aalpha,9alpha,10abeta))-

Synonym CCRIS 7122

Formula C₂₀H₂₆O₄

Formula Wt. 330.42

Melting Point 210-220°C

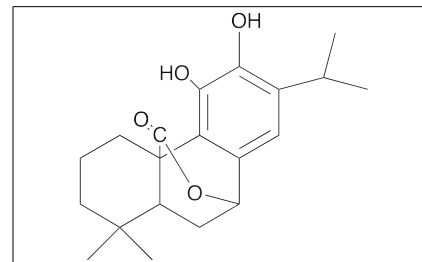
Purity ≥98%

Solubility Soluble in DMSO, DMF or ethanol. Sparingly soluble in aqueous buffers.

Store Temp -20°C

Ship Temp Blue Ice

Description Carnosol is a diterpene compound originally found in rosemary plants. Carnosol exhibits antidepressant, anti-inflammatory, anti-angiogenic, and anticancer chemotherapeutic activities. Carnosol inhibits microsomal prostaglandin E2 (PGE2) synthase and decreases production of pro-inflammatory PGE2; in vivo, it inhibits PMA-induced edema and decreases expression of IL-1β and TNF-α. Carnosol inhibits the epithelial-to-mesenchymal transition (EMT) in ovarian cancer cells and decreases growth and viability in breast, ovarian, and intestinal cancer cells. In colon cancer cells, carnosol increases activation of caspases 3 and 9, induces cleavage of PARP, upregulates expression of p53, downregulates expression of MDM2, and suppresses activation of STAT3, JAK2, and Src. Additionally, this compound inhibits androgen and estrogen receptors, suppressing tumor growth and PSA levels in animal models of prostate cancer. TEST!!!!!!



Pricing and Availability

Bulk quantities available upon request

Product ID	Size	List Price
C0267	1 mg	\$52.50
C0267	5 mg	\$239.70
C0267	25 mg	\$674.20

References Vergara D, Simeone P, Bettini S, et al. Antitumor activity of the dietary diterpene carnosol against a panel of human cancer cell lines. *Food Funct.* 2014 Jun 28;5(6):1261-9. PMID: 24733049.

Park KW, Kundu J, Chae IG, et al. Carnosol induces apoptosis through generation of ROS and inactivation of STAT3 signaling in human colon cancer HCT116 cells. *Int J Oncol.* 2014 Apr;44(4):1309-15. PMID: 24481553.

López-Jiménez A, García-Caballero M, Medina MÁ, et al. Anti-angiogenic properties of carnosol and carnosic acid, two major dietary compounds from rosemary. *Eur J Nutr.* 2013 Feb;52(1):85-95. PMID: 22173778.

Machado DG, Cunha MP, Neis VB, et al. Antidepressant-like effects of fractions, essential oil, carnosol and betulinic acid isolated from *Rosmarinus officinalis* L. *Food Chem.* 2013 Jan 15;136(2):999-1005. PMID: 23122155.

Bauer J, Kuehn S, Rollinger JM, et al. Carnosol and carnosic acids from *Salvia officinalis* inhibit microsomal prostaglandin E2 synthase-1. *J Pharmacol Exp Ther.* 2012 Jul;342(1):169-76. PMID: 22511203.

Mengoni ES, Vichera G, Rigano LA, et al. Suppression of COX-2, IL-1β and TNF-α expression and leukocyte infiltration in inflamed skin by bioactive compounds from *Rosmarinus officinalis* L. *Fitoterapia.* 2011 Apr;82(3):414-21. PMID: 21129455.

Johnson JJ, Syed DN, Suh Y, et al. Disruption of androgen and estrogen receptor activity in prostate cancer by a novel dietary diterpene carnosol: implications for chemoprevention. *Cancer Prev Res (Phila).* 2010 Sep;3(9):1112-23. PMID: 20736335.

Caution: This product is intended for laboratory and research use only. It is not for human or drug use.