

## Product Information

**Product ID** P1770  
**CAS No.** 18457-55-1  
**Chemical Name** (S)-(-)-Perillyl alcohol

**Synonym** L(-)-Perillyl alcohol, Isocarveol, Perilla alcohol

**Formula** C<sub>10</sub>H<sub>16</sub>O  
**Formula Wt.** 152.23

**Melting Point**

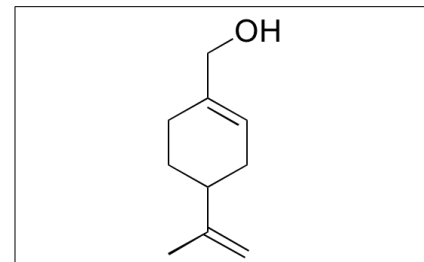
**Purity** ≥85%

**Solubility** Soluble in ethanol and acetone. Insoluble in water.

**Store Temp** 4° C

**Ship Temp** Ambient

**Description** Perillyl alcohol is a monoterpene found in various plant and fruit sources. Perillyl alcohol exhibits neuroprotective, antioxidative, anti-inflammatory, anti-asthma, anti-allergic, immunomodulatory, anticancer chemotherapeutic, and chemopreventive activities. In animal models of stroke, perillyl alcohol inhibits neurological deficits, improves motor coordination, increases levels of glutathione, catalase, glutathione reductase, and glutathione peroxidase, decreases infarct volume, and suppresses expression of IL-1B, TNF-α, IL-6, COX-2, iNOS, and NF-κB. Perillyl alcohol inhibits farnesyl transferase, geranylgeranyl transferase, telomerase, and Na<sup>+</sup>/K<sup>+</sup> ATPases. In animal models of OVA-induced allergy, perillyl alcohol suppresses proliferation of antigen-stimulated immune cells, decreasing the allergic response. This compound shows clinical benefit in the treatment of glioblastoma and induces G1 phase cell cycle arrest and increases expression of p15 and p21 in cellular models of cancer. Additionally, perillyl alcohol prevents UV- and DMBA-induced development of skin cancer in vivo.



**Bulk quantities available upon request**

Product ID	Size
P1770	1 g
P1770	10 g
P1770	50 g

**References** Tabassum R, Vaibhav K, Shrivastava P, et al. Perillyl alcohol improves functional and histological outcomes against ischemia-reperfusion injury by attenuation of oxidative stress and repression of COX-2, NOS-2 and NF-κB in middle cerebral artery occlusion rats. *Eur J Pharmacol.* 2014 Sep 18. [Epub ahead of print]. PMID: 25240714.

Imamura M, Sasaki O, Okunishi K, et al. Perillyl alcohol suppresses antigen-induced immune responses in the lung. *Biochem Biophys Res Commun.* 2014 Jan 3;443(1):266-71. PMID: 24309112.

DA Fonseca CO, Teixeira RM, Silva JC, et al. Long-term outcome in patients with recurrent malignant glioma treated with Perillyl alcohol inhalation. *Anticancer Res.* 2013 Dec;33(12):5625-31. PMID: 24324108.

Koyama M, Sowa Y, Hitomi T, et al. Perillyl alcohol causes G1 arrest through p15(INK4b) and p21(WAF1/Cip1) induction. *Oncol Rep.* 2013 Feb;29(2):779-84. PMID: 23233050.

Sundin T, Peffley DM, Gauthier D, et al. The isoprenoid perillyl alcohol inhibits telomerase activity in prostate cancer cells. *Biochimie.* 2012 Dec;94(12):2639-48. PMID: 22902867.

Garcia DG, Amorim LM, de Castro Faria MV, et al. The anticancer drug perillyl alcohol is a Na/K-ATPase inhibitor. *Mol Cell Biochem.* 2010 Dec;345(1-2):29-34. PMID: 20689980.

Stratton SP, Alberts DS, Einspahr JG, et al. A phase 2a study of topical perillyl alcohol cream for chemoprevention of skin

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