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## **Product Information**

Product ID C0269 CAS No. 7235-40-7 Chemical Name B,B-Carotene

Synonym Carotaben, Provatene, Solatene

Formula C<sub>40</sub>H<sub>56</sub> Formula Wt. 536.87 Melting Point 183°C Purity ≥97%

**Solubility** Insoluble in water.

Sparingly soluble in ethanol. Soluble in benzene or

chloroform.

Store Temp -20°C Ship Temp Ambient

## Pricing and Availability

Bulk quanitites available upon request

Product ID	Size	List Price
C0269	1 g	\$22.50
C0269	5 g	\$44.80
C0269	25 g	\$149.90
C0269	50 g	\$254.70

Description B-Carotene is a red-orange terpene pigment originally found in various plants and fruits; it is a prodrug for vitamin A. B-Carotene exhibits antioxidative, cytoprotective, anticancer, anti-inflammatory, anti-hyperlipidemic, and anti-obesity activities. B-Carotene is used in research models to quantify antioxidative activity. In bone marrow cells, B-carotene protects against radioactive isotope-induced DNA damage. In breast cancer cells, this compound induces cell cycle arrest and apoptosis, decreasing cellular viability. B-Carotene decreases total cholesterol, VLDL and LDL levels, suppresses expression of SREBP2 and LDL-R, and increases expression of PPARa in vivo. In other animal models, this compound decreases body fat and adipocyte size and suppresses TNF- $\alpha$ -induced inflammation.

References Abdel-Mageed WM, Bayoumi SA, Salama AA, et al. Antioxidant lipoxygenase inhibitors from the leaf extracts of Simmondsia chinensis. Asian Pac J Trop Med. 2014 Sep;7S1:S521-6. PMID: 25312177.

> Berti AP, Düsman E, Mariucci RG, et al. Antimutagenic and radioprotective activities of beta-carotene against the biological effects of iodine-131 radiopharmaceutical in Wistar rats. Genet Mol Res. 2014 Mar 31;13(1):2248-58. PMID: 24737473.

Gloria NF, Soares N, Brand C, et al. Lycopene and beta-carotene induce cell-cycle arrest and apoptosis in human breast cancer cell lines. Anticancer Res. 2014 Mar; 34(3):1377-86. PMID: 24596385.

Silva LS, de Miranda AM, de Brito Magalhães CL, et al. Diet supplementation with beta-carotene improves the serum lipid profile in rats fed a cholesterol-enriched diet. J Physiol Biochem. 2013 Dec;69(4):811-20. PMID: 23645541.

Di Tomo P, Canali R, Ciavardelli D, et al. β-Carotene and lycopene affect endothelial response to TNF-α reducing nitrooxidative stress and interaction with monocytes. Mol Nutr Food Res. 2012 Feb;56(2):217-27. PMID: 22162208.

Amengual J, Gouranton E, van Helden YG, et al. Beta-carotene reduces body adiposity of mice via BCMO1. PLoS One. 2011;6(6): e20644. PMID: 21673813.

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