

Beta-Carotene Datasheet

5th Edition (Revised in January, 2017)

[Product Information]

Name: Beta-Carotene

Catalog No.: CFN98117

Cas No.: 7235-40-7

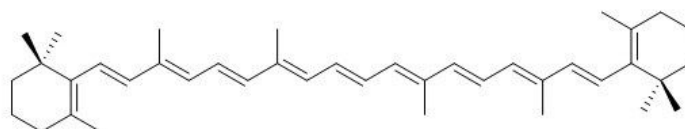
Purity: >=90%

M.F: C₄₀H₅₆

M.W: 536.88

Physical Description: Powder

Synonyms: Cyclohexene, 1,1'-(3,7,12,16-tetramethyl-1,3,5,7,9,11,13,15,17-octadecanone-1,18-diyl)bis[2,6,6-trimethyl-, (all-E)-; Provitamin A.



[Intended Use]

1. Reference standards;
2. Pharmacological research;
3. Food research;
4. Synthetic precursor compounds;
5. Intermediates & Fine Chemicals;
6. Others.

[Source]

The roots of *Daucus carota*.

[Biological Activity or Inhibitors]

beta-Carotene has antioxidant activity.^[1]

Dietary supplementation of carotenoids may act as moderate hypocholesterolemic agents, secondary to their inhibitory effect on macrophage 3-hydroxy-3-methyl glutaryl coenzyme A (HMGCoA) reductase, the rate limiting enzyme in cholesterol synthesis.^[2]

beta-Carotene has antiapoptotic and antioxidant effects against methotrexate-induced testicular injury.^[3]

beta-Carotene and linoleic acid have inhibitory effect on the in vitro growth of human cancer cells, they may be cytotoxic to human cancer cells in vivo.^[4]

beta-Carotene, chlorogenic acid, and curcumin have protective effects against gamma -radiation-induced in vivo chromosomal damage.^[5]

[Solvent]

Chloroform, Dichloromethane, Ethyl Acetate, DMSO, Acetone, etc.

[HPLC Method]^[6]

Mobile phase: Methanol - Acetonitrile-2-Propanol=54:44:2;

Flow rate: 1.0 ml/min;

Column temperature: Room Temperature;

The wave length of determination: 460 nm.

[Storage]

2-8°C, Protected from air and light, refrigerate or freeze.

[References]

[1] Terao J. *Lipids*, 1989 Jul;24(7):659-61.

[2] Fuhrman B, Elis A, Aviram M. *Biochem. Biophys. Res. Commun.*, 1997, 233(3):658-62.

[3] Vardi N, Parlakpinar H, Ates B, et al. *Fertility & Sterility*, 2009, 92(6):2028-33.

[4] Shultz T D, Chew B P, Seaman W R, *et al. Cancer Lett.*, 1992, 63(2):125-33.

[5] Abraham S K, Sarma L, Kesavan P C. *Mutat Res.*, 1993 Nov;303(3):109-12.

[6] Bononi M, Commissati I, Lubian E, *et al. Anal. Bioanal. Chem.*, 2002 Jan;372(2):401-3.

[Contact]

Address:

S5-3 Building, No. 111, Dongfeng Rd.,
Wuhan Economic and Technological Development Zone,
Wuhan, Hubei 430056,
China

Email: info@chemfaces.com

Tel: +86-27-84237783

Fax: +86-27-84254680

Web: www.chemfaces.com

Tech Support: service@chemfaces.com