

$\beta$ -Carotene

## Chemical Properties

CAS No. : 7235-40-7

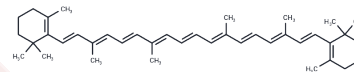
Formula: C<sub>40</sub>H<sub>56</sub>

Molecular Weight: 536.87

Storage: Keep away from direct sunlight, Store under nitrogen,  
Store at low temperature

Powder: -20°C for 3 years | In solvent: -80°C for 1 year

Actual storage temperature shall be subject to the COA.



## Biological Description

Description	$\beta$ -Carotene (Provitamin A) is a naturally-occurring retinol (vitamin A) precursor obtained from certain fruits and vegetables with potential antineoplastic and chemopreventive activities. As an anti-oxidant, beta carotene inhibits free-radical damage to DNA.
Targets(IC50)	Apoptosis, Reactive Oxygen Species, Endogenous Metabolite, ROS

## Solubility Information

Solubility	DMSO: 16.7 mg/mL (31.11 mM), Sonication is recommended. Chloroform: 16.37 mg/mL (30.49 mM), Sonication is recommended. ( $< 1$ mg/ml refers to the product slightly soluble or insoluble)
------------	---

## Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	1.8626 mL	9.3132 mL	18.6265 mL
5 mM	0.3725 mL	1.8626 mL	3.7253 mL
10 mM	0.1863 mL	0.9313 mL	1.8626 mL
50 mM	0.0373 mL	0.1863 mL	0.3725 mL

Please select the appropriate solvent to prepare the stock solution, according to the solubility of the product in different solvents. Please use it as soon as possible.

Note: The dilution table applies only to solid products. For liquid products, please calculate the stock solution based on the stated concentration and/or density.

## Reference

Kasperczyk S, et al. Toxicol Appl Pharmacol. 2014 Oct 1;280(1):36-41.

Bi G, Liang J, Shan G, et al. Retinol saturase mediates retinoid metabolism to impair a ferroptosis defense system in cancer cells. Cancer Research. 2023: CAN-22-3977.

**Inhibitor · Natural Compounds · Compound Libraries · Recombinant Proteins**

This product is for Research Use Only · Not for Human or Veterinary or Therapeutic Use

Tel:781-999-4286 E\_mail:info@targetmol.com Address:34 Washington Street,Wellesley Hills,MA 02481