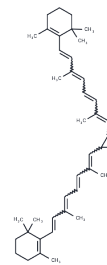


## β-Carotene-15,15'-epoxide

### Chemical Properties

CAS No. :	132541-62-9
Formula:	C40H56O
Molecular Weight:	552.872
Storage:	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	β-Carotene-15,15-epoxide acts as an XIAP antagonist with pro-apoptotic (Apoptosis) and anti-tumor properties, found in the leaves of Spondias mombin. In rat models of DMBA-induced breast cancer, it induces tumor cell apoptosis by binding to the BIR3 domain of the XIAP protein, thereby inhibiting its interaction with caspase-9. Additionally, β-carotene-15,15-epoxide significantly reduces BCL-2, COX-2, and TNF-α expression in tumor tissue, decreases MDA levels, enhances catalase activity, and modulates biochemical markers in serum such as LDH, ALP, and ALT, indicating its antioxidant, anti-inflammatory, and metabolic protective effects. This compound is useful for researching inflammation-related diseases and tumors such as breast cancer.
Targets(IC50)	Apoptosis,Bcl-2 Family,Caspase,COX,IAP,TNF

### Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	1.8087 mL	9.0437 mL	18.0874 mL
5 mM	0.3617 mL	1.8087 mL	3.6175 mL
10 mM	0.1809 mL	0.9044 mL	1.8087 mL
50 mM	0.0362 mL	0.1809 mL	0.3617 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.

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

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