



# LKT Laboratories, Inc.

## Dimethylamino Parthenolide

Phone: 888-558-5227  
651-644-8424  
Fax: 888-558-7329  
Email: [getinfo@lktlabs.com](mailto:getinfo@lktlabs.com)  
Web: [lktlabs.com](http://lktlabs.com)

### Product Information

**Product ID** D336486  
**CAS No.** 870677-05-7  
**Chemical Name** (4E,8S)-8-[(dimethylamino)methyl]-2,3,6,7,7aS,8,10aS,10bR-octahydro-1aR,5-dimethyl-oxireno[9,10]cyclodeca[1,2-b]furan-9(1aH)-one

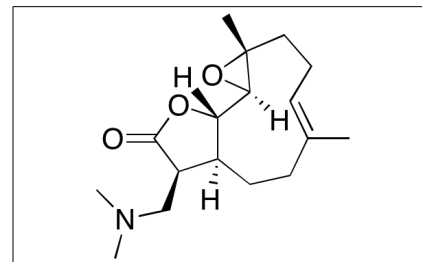
**Synonym** Dimethylaminoparthenolide; DMAPT

**Formula** C<sub>17</sub>H<sub>27</sub>NO<sub>3</sub>  
**Formula Wt.** 293.41  
**Melting Point** 149°C to 143°C  
**Purity** ≥98%  
**Solubility** DMSO (10 mg/mL), Ethanol (10 mg/mL).

**Store Temp** -20°C

**Ship Temp** Ambient

**Description** Dimethylaminoparthenolide (DMAPT) is a water soluble parthenolide analog with anticancer activities in various tumor models. It suppresses in vivo tumor growth of tobacco-associated lung and bladder cancer by inhibiting NFκB DNA binding and cellular proliferation. DMAPT inhibits NF-κB and prevents double-stranded DNA break repair. In vitro and in vivo DMAPT decreases activity of STAT3 and MCL-1, decreasing cell proliferation and lung tumor growth.



**Bulk quantities available upon request**

Product ID	Size
D336486	5 mg
D336486	10 mg
D336486	25 mg

**References** Shanmugam R, Kusumanchi P, Appaiah H, et al. A water soluble parthenolide analog suppresses in vivo tumor growth of two tobacco-associated cancers, lung and bladder cancer, by targeting NF-κB and generating reactive oxygen species. *Int J Cancer*. 2011;128(10):2481-94. PMID: 20669221 PMCID: PMC2982935 DOI: 10.1002/ijc.25587.

Song JM, Qian X, Upadhyaya P, et al. Dimethylaminoparthenolide, a water soluble parthenolide, suppresses lung tumorigenesis through down-regulating the STAT3 signaling pathway. *Curr Cancer Drug Targets*. 2014 Jan;14(1):59-69. PMID: 24200081.

Estabrook NC, Chin-Sinex H, Borgmann AJ, et al. Inhibition of NF-κB and DNA double-strand break repair by DMAPT sensitizes non-small-cell lung cancers to X-rays. *Free Radic Biol Med*. 2011 Dec 15;51(12):2249-58. PMID: 22019440.

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