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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 C₁₇H₂₇NO₃ Formula Wt. 293.41

Melting Point 149°C to 143°C

Purity ≥98%

Solubility DMSO (10 mg/mL), Ethanol (10 mg/mL).

DMF (20 mg/mL). DMF:H2O (5:95).

Store Temp -20°C Ship Temp Ambient

Description Dimethylaminoparthenolide (DMAPT) is a parthenolide analog with improved solubility and bioavailability showing anticancer

activities in various tumor models. It suppresses in vivo tumor growth of tobacco-associated lung and bladder cancer by inhibiting NFkB 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.

Pricing and Availability

Bulk quanitites available upon request

Product ID	Size	List Price
D336486	5 mg	\$50.20
D336486	10 mg	\$83.00
D336486	25 mg	\$171.80

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-kB 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, Upadhyayya 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-kB 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.

Guzman M, Rossi R, Neelakantan S, et al. An orally bioavailable parthenolide analog selectively eradicates acute myelogenous leukemia stem and progenitor cells. Blood. 2007 Dec 15;110(13):4427-4435. PMID: 17804695.

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