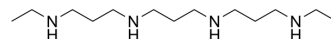


## N1,N11-Diethylnorspermine

Cat. No.:	HY-13610
CAS No.:	121749-39-1
Molecular Formula:	C <sub>13</sub> H <sub>32</sub> N <sub>4</sub>
Molecular Weight:	244.42
Target:	Caspase
Pathway:	Apoptosis
Storage:	Please store the product under the recommended conditions in the Certificate of Analysis.



### BIOLOGICAL ACTIVITY

<b>Description</b>	N1,N11-Diethylnorspermine (DENSPM) is a potent anticancer agent. N1,N11-Diethylnorspermine is a spermine analog that activates polyamine catabolism. N1,N11-Diethylnorspermine induces the release of cytochrome c from mitochondria, resulting in activation of caspase 3. N1,N11-Diethylnorspermine kills glioblastoma multiforme (GBM) cells through induction of SSAT (spermidine/spermine N1-acetyltransferase) coupled with H <sub>2</sub> O <sub>2</sub> production <sup>[1][2][3]</sup> .
<b>IC<sub>50</sub> &amp; Target</b>	Caspase 3
<b>In Vivo</b>	N1,N11-Diethylnorspermine (40 mg/kg, three times per day for two cycles of 6 days) clearly prevents tumor growth in mice bearing xenografts of the DU-145 cell line <sup>[1]</sup> . MCE has not independently confirmed the accuracy of these methods. They are for reference only.

### REFERENCES

- [1]. Schipper RG, et al. Antitumor activity of the polyamine analog N(1), N(11)-diethylnorspermine against human prostate carcinoma cells. *Prostate*. 2000 Sep 1;44(4):313-21.
- [2]. Holst CM, et al. Molecular mechanisms underlying N1, N11-diethylnorspermine-induced apoptosis in a human breast cancer cell line. *Anticancer Drugs*. 2008 Oct;19(9):871-83.
- [3]. Jiang R, et al. Activation of polyamine catabolism by N1,N11-diethylnorspermine leads to cell death in glioblastoma. *Int J Oncol*. 2007 Aug;31(2):431-40.

**Caution: Product has not been fully validated for medical applications. For research use only.**

Tel: 609-228-6898

Fax: 609-228-5909

E-mail: tech@MedChemExpress.com

Address: 1 Deer Park Dr, Suite Q, Monmouth Junction, NJ 08852, USA