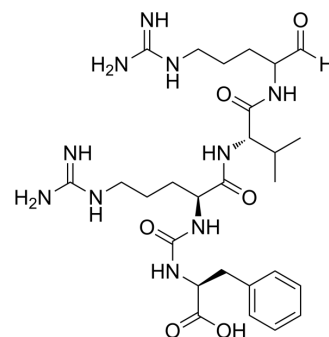


## Antipain

<b>Cat. No.:</b>	HY-127039
<b>CAS No.:</b>	37691-11-5
<b>Molecular Formula:</b>	C <sub>27</sub> H <sub>44</sub> N <sub>10</sub> O <sub>6</sub>
<b>Molecular Weight:</b>	604.7
<b>Target:</b>	Ser/Thr Protease; DNA/RNA Synthesis
<b>Pathway:</b>	Metabolic Enzyme/Protease; Cell Cycle/DNA Damage
<b>Storage:</b>	Please store the product under the recommended conditions in the Certificate of Analysis.



### BIOLOGICAL ACTIVITY

<b>Description</b>	Antipain is a protease inhibitor isolated from Actinomycetes. Antipain inhibits N-methyl-N'-nitro-N-nitrosoguanidine (MNNG)-induced transformation and increases chromosomal aberrations. Antipain restricts uterine DNA synthesis and function in mice <sup>[1][2][3][4]</sup> .
<b>In Vivo</b>	The intact, cycling female mice received subcutaneous injections of Antipain (3 mg) for 16 days, their uteri shows significant diminution in weight and total DNA when compared to untreated controls <sup>[4]</sup> . Antipain (100 µg/g body wt; i.p.; at 12h intervals from 0 to 120 h or 240 to 360 h) shows inhibitory effect on Urethane-induced lung neoplasia in mice <sup>[5]</sup> . MCE has not independently confirmed the accuracy of these methods. They are for reference only.

### REFERENCES

- [1]. DiPaolo JA, et al. Antipain inhibits N-methyl-N'-nitro-N-nitrosoguanidine-induced transformation and increases chromosomal aberrations. Proc Natl Acad Sci U S A. 1980 Nov;77(11):6649-53.
- [2]. Suda H, et al. Antipain, a new protease inhibitor isolated from actinomycetes. J Antibiot (Tokyo). 1972 Apr;25(4):263-6.
- [3]. Sudha VT, et al. Identification of a serine protease as a major allergen (Per a 10) of Periplaneta americana. Allergy. 2008 Jun;63(6):768-76.
- [4]. Nomura T, et al. Inhibiting effects of antipain on urethane-induced lung neoplasia in mice. Br J Cancer. 1980;42(4):624-626.
- [5]. Katz J, et al. Antipain and leupeptin restrict uterine DNA synthesis and function in mice. Proc Natl Acad Sci U S A. 1977;74(9):3754-3757.

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

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