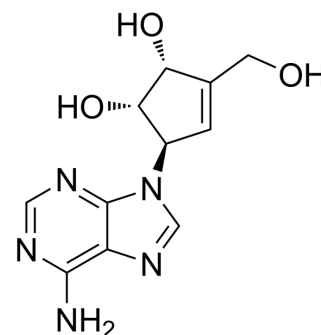


## Neplanocin A

<b>Cat. No.:</b>	HY-130430
<b>CAS No.:</b>	72877-50-0
<b>Molecular Formula:</b>	C <sub>11</sub> H <sub>13</sub> N <sub>5</sub> O <sub>3</sub>
<b>Molecular Weight:</b>	263.25
<b>Target:</b>	Antibiotic; Orthopoxvirus
<b>Pathway:</b>	Anti-infection
<b>Storage:</b>	Please store the product under the recommended conditions in the Certificate of Analysis.



### BIOLOGICAL ACTIVITY

<b>Description</b>	Neplanocin A ((-)-Neplanocin A) is an antitumor antibiotic with significant antitumor activity against murine L1210 leukemia. Neplanocin A is also an irreversible inhibitor of AdoHcy hydrolase (K <sub>i</sub> =8.39 nM). Neplanocin A also has antiviral activity and is effective against vaccinia virus. Neplanocin A is obtained from <i>Ampulariella regularis</i> <sup>[1]</sup> .								
<b>IC<sub>50</sub> &amp; Target</b>	AdoHcy hydrolase; vaccinia <sup>[1]</sup> .								
<b>In Vitro</b>	<p>Neplanocin A (1 μM; 0-70 h) inhibits the growth of L929 mouse cells<sup>[1]</sup>.</p> <p>Neplanocin A (1 μM; 72 h) inhibits vaccinia virus plaque formation in monolayer cultures of mouse L-cells<sup>[1]</sup>.</p> <p>MCE has not independently confirmed the accuracy of these methods. They are for reference only.</p> <p>Cell Viability Assay<sup>[1]</sup></p> <table border="1"> <tr> <td>Cell Line:</td> <td>L929 mouse cells</td> </tr> <tr> <td>Concentration:</td> <td>1 μM</td> </tr> <tr> <td>Incubation Time:</td> <td>0-70 h</td> </tr> <tr> <td>Result:</td> <td>Slowed the rate of increase in cell number.</td> </tr> </table>	Cell Line:	L929 mouse cells	Concentration:	1 μM	Incubation Time:	0-70 h	Result:	Slowed the rate of increase in cell number.
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### REFERENCES

[1]. Borchardt RT, Keller BT, Patel-Thombre U. Neplanocin A. A potent inhibitor of S-adenosylhomocysteine hydrolase and of vaccinia virus multiplication in mouse L929 cells. *J Biol Chem.* 1984 Apr 10;259(7):4353-8.

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

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