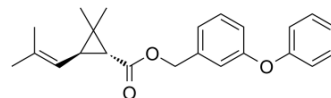


## D-Phenothrin

<b>Cat. No.:</b>	HY-B1072A
<b>CAS No.:</b>	26046-85-5
<b>Molecular Formula:</b>	C <sub>23</sub> H <sub>26</sub> O <sub>3</sub>
<b>Molecular Weight:</b>	350.45
<b>Target:</b>	Parasite
<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>	D-Phenothrin ((-)-trans-Phenothrin), an orally active Type II synthetic pyrethroid, is widely used to kill insects, mosquitoes, and human lice. D-Phenothrin is also used in veterinary medicine to control insect pests on animals and protect agricultural crops <sup>[1]</sup> .								
<b>In Vivo</b>	<p>D-Phenothrin ((-)-trans-Phenothrin; 25-200 mg/kg; IP; 14 consecutive days) significantly, dose-dependently increases oxidative DNA damage in both organs of animals<sup>[1]</sup>.</p> <p>D-Phenothrin (100, 300 or 1000 mg/kg/day; p.o.; 3 days) exhibits no potential to cause adverse estrogenic or (anti-)androgenic effects<sup>[2]</sup>.</p> <p>MCE has not independently confirmed the accuracy of these methods. They are for reference only.</p> <table border="1"> <tr> <td>Animal Model:</td> <td>Male Wistar albino rats (6-week-old, 150-200 g)</td> </tr> <tr> <td>Dosage:</td> <td>25, 50, 100, 200 mg/kg</td> </tr> <tr> <td>Administration:</td> <td>IP; 14 consecutive days</td> </tr> <tr> <td>Result:</td> <td>Had a statistically significant, dose-dependent increase in oxidative DNA damage in both organs of animals.</td> </tr> </table>	Animal Model:	Male Wistar albino rats (6-week-old, 150-200 g)	Dosage:	25, 50, 100, 200 mg/kg	Administration:	IP; 14 consecutive days	Result:	Had a statistically significant, dose-dependent increase in oxidative DNA damage in both organs of animals.
Animal Model:	Male Wistar albino rats (6-week-old, 150-200 g)								
Dosage:	25, 50, 100, 200 mg/kg								
Administration:	IP; 14 consecutive days								
Result:	Had a statistically significant, dose-dependent increase in oxidative DNA damage in both organs of animals.								

### REFERENCES

- [1]. Atmaca E, et al. d-Phenothrin-induced oxidative DNA damage in rat liver and kidney determined by HPLC-ECD/DAD. *Environ Toxicol.* 2015 May;30(5):607-13.
- [2]. Yamada T, et al. Lack of estrogenic or (anti-)androgenic effects of d-phenothrin in the uterotrophic and Hershberger assays. *Toxicology.* 2003 Apr 22;186(3):227-39.

---

**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](mailto:tech@MedChemExpress.com)

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