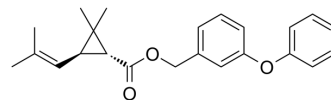


D-Phenothrin

Cat. No.:	HY-B1072A
CAS No.:	26046-85-5
Molecular Formula:	C ₂₃ H ₂₆ O ₃
Molecular Weight:	350.45
Target:	Parasite
Pathway:	Anti-infection
Storage:	Please store the product under the recommended conditions in the Certificate of Analysis.



BIOLOGICAL ACTIVITY

Description	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 ^[1] .								
In Vivo	<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^[1].</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^[2].</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

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