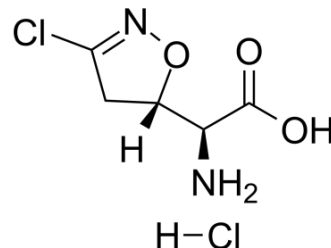


Acivicin hydrochloride

Cat. No.:	HY-W016586A
CAS No.:	161922-40-3
Molecular Formula:	C ₅ H ₈ Cl ₂ N ₂ O ₃
Molecular Weight:	215.03
Target:	Parasite
Pathway:	Anti-infection
Storage:	4°C, stored under argon * In solvent : -80°C, 6 months; -20°C, 1 month (stored under argon)



BIOLOGICAL ACTIVITY

Description	Acivicin hydrochloride (AT-125 hydrochloride), a natural product produced by <i>Streptomyces sviveus</i> , is a γ -glutamyl transpeptidase (GGT) inhibitor. Acivicin hydrochloride can cross the blood-brain barrier and has anti-cancer, anti-parasitic properties ^{[1][2]} .								
IC₅₀ & Target	Caution: Product has not been fully validated for medical applications. For research use only. γ -glutamyl transpeptidase ^[1] Tel: 609-228-6898 Fax: 609-228-5909 E-mail: tech@MedChemExpress.com Address: 1-Deer Park Dr, Suite O, Monmouth Junction, NJ 08852, USA								
In Vitro	Acivicin hydrochloride (AT-125 hydrochloride; 0.1-50 μ M; 5 days) has an IC ₅₀ of 0.7 μ M in human HepG2 cells ^[1] . MCE has not independently confirmed the accuracy of these methods. They are for reference only.								
In Vivo	Acivicin hydrochloride (AT-125 hydrochloride; 5 mg/kg; IP; twice weekly) reduces urinary γ -GT by 70-78% ^[3] . MCE has not independently confirmed the accuracy of these methods. They are for reference only.								
	<table border="1"> <tr> <td>Animal Model:</td> <td>Male pigmented Long-Evans rats weighed between 250 g and 300 g exposed to Toluene^[3]</td> </tr> <tr> <td>Dosage:</td> <td>5 mg/kg</td> </tr> <tr> <td>Administration:</td> <td>IP; twice weekly (monday and wednesday)</td> </tr> <tr> <td>Result:</td> <td>Reduced urinary γ-GT by 70-78%.</td> </tr> </table>	Animal Model:	Male pigmented Long-Evans rats weighed between 250 g and 300 g exposed to Toluene ^[3]	Dosage:	5 mg/kg	Administration:	IP; twice weekly (monday and wednesday)	Result:	Reduced urinary γ -GT by 70-78%.
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REFERENCES

- [1]. Delphine Waniusiow, et al. Toluene-induced hearing loss in acivicin-treated rats. *Neurotoxicol Teratol.* May-Jun 2008;30(3):154-60.
- [2]. Kreuzer J, et al. Target discovery of acivicin in cancer cells elucidates its mechanism of growth inhibition. *Chem Sci.* 2014 Dec 1;6(1):237-245. Epub 2014 Sep 26.
- [3]. Chikhale EG, et al. Carrier-mediated transport of the antitumor agent acivicin across the blood-brain barrier. *Biochem Pharmacol.* 1995 Mar 30;49(7):941-5.