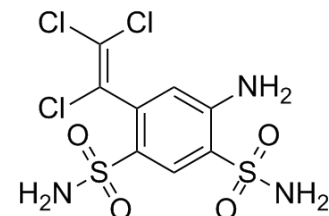


Clorsulon

Cat. No.:	HY-B0488		
CAS No.:	60200-06-8		
Molecular Formula:	C ₈ H ₈ Cl ₃ N ₃ O ₄ S ₂		
Molecular Weight:	380.66		
Target:	Parasite		
Pathway:	Anti-infection		
Storage:	Powder	-20°C	3 years
		4°C	2 years
	In solvent	-80°C	6 months
		-20°C	1 month



SOLVENT & SOLUBILITY

In Vitro

DMSO : 100 mg/mL (262.70 mM; Need ultrasonic)

Preparing Stock Solutions	Solvent Concentration	Mass		
		1 mg	5 mg	10 mg
	1 mM	2.6270 mL	13.1351 mL	26.2702 mL
	5 mM	0.5254 mL	2.6270 mL	5.2540 mL
	10 mM	0.2627 mL	1.3135 mL	2.6270 mL

Please refer to the solubility information to select the appropriate solvent.

In Vivo

- Add each solvent one by one: **10% DMSO >> 40% PEG300 >> 5% Tween-80 >> 45% saline**
Solubility: ≥ 2.5 mg/mL (6.57 mM); Clear solution
- Add each solvent one by one: **10% DMSO >> 90% (20% SBE-β-CD in saline)**
Solubility: ≥ 2.5 mg/mL (6.57 mM); Clear solution
- Add each solvent one by one: **10% DMSO >> 90% corn oil**
Solubility: ≥ 2.5 mg/mL (6.57 mM); Clear solution

BIOLOGICAL ACTIVITY

Description

Clorsulon is used in the treatment of *Fasciola hepatica* infections in calves and sheep. Target: Antiparasitic. Clorsulon is a competitive inhibitor of both 3-phosphoglycerate and ATP and had a K_i of 0.29 mM, inhibits glucose utilization and acetate and propionate formation by mature *Fasciola hepatica* in vitro. [1] Clorsulon (a single dose of 15 mg/kg) is effective in removing over 90% of immature *Fasciola hepatica* from sheep (6 weeks after infection) and calves (8 weeks after infection). A 2.5 mg/kg dose removed over 90% of mature (16 weeks old) liver fluke from sheep [1]. Clorsulon causes severe disruption to the tegument and gut of *Fasciola hepatica* after in vivo incubation [2].

REFERENCES

- [1]. Mrozik, H., et al., 4-amino-6-(trichloroethenyl)-1,3-benzenedisulfonamide, a new, potent fasciolicide. *J Med Chem*, 1977. 20(9): p. 1225-7.
- [2]. Meaney, M., et al., Transmission electron microscope study of the ultrastructural changes induced in the tegument and gut of *Fasciola hepatica* following in vivo drug treatment with clorsulon. *Parasitol Res*, 2004. 92(3): p. 232-41.
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Caution: Product has not been fully validated for medical applications. For research use only.

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