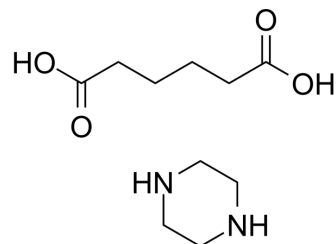


Piperazine adipate

Cat. No.:	HY-B2186		
CAS No.:	142-88-1		
Molecular Formula:	C ₁₀ H ₂₀ N ₂ O ₄		
Molecular Weight:	232.28		
Target:	Parasite		
Pathway:	Anti-infection		
Storage:	Powder	-20°C	3 years
		4°C	2 years
	In solvent	-80°C	2 years
		-20°C	1 year



SOLVENT & SOLUBILITY

In Vitro

H₂O : 14.29 mg/mL (61.52 mM; Need ultrasonic)
 DMSO : < 1 mg/mL (insoluble or slightly soluble)

Preparing Stock Solutions	Solvent Concentration	Mass		
		1 mg	5 mg	10 mg
	1 mM	4.3051 mL	21.5257 mL	43.0515 mL
	5 mM	0.8610 mL	4.3051 mL	8.6103 mL
	10 mM	0.4305 mL	2.1526 mL	4.3051 mL

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

In Vivo

1. Add each solvent one by one: PBS
 Solubility: 33.33 mg/mL (143.49 mM); Clear solution; Need ultrasonic

BIOLOGICAL ACTIVITY

Description

Piperazine adipate is a potent broad spectrum anthelmintic against many common worm infections in mammals.

In Vitro

Piperazine adipate (10 mM) causes mortality of *A. galli* and *H. gallinae* after a maximum of 30 min exposure, inhibits malate oxidation by 78%, and inhibits aldolase activity in both parasites. Piperazine adipate (10 mM) also inhibits cholinesterase activity by 96% in *Ascaridia galli* (*A. galli*) and 93% in *Heterakis gallinae* (*H. gallinae*). Piperazine adipate inhibits oxaloacetate reduction by 26% and 55% in *A. galli* and *H. gallinae*, respectively^[1].

MCE has not independently confirmed the accuracy of these methods. They are for reference only.

REFERENCES

[1]. Sharma RK, et al. Effect of parbendazole and piperazine adipate on the activity of some enzymes of *Ascaridia galli* and *Heterakis gallinae*. *Vet Parasitol.* 1987 May;24(3-4):211-20.

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

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