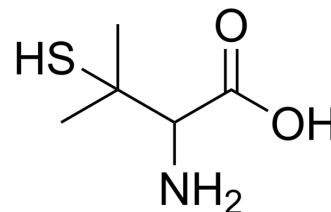


DL-Penicillamine

Cat. No.:	HY-W017457
CAS No.:	52-66-4
Molecular Formula:	C ₅ H ₁₁ NO ₂ S
Molecular Weight:	149.21
Target:	Others
Pathway:	Others
Storage:	<div>Powder</div> <div>-20°C 3 years</div> <div>4°C 2 years</div> <div>In solvent</div> <div>-80°C 2 years</div> <div>-20°C 1 year</div>



SOLVENT & SOLUBILITY

In Vitro

H₂O : 33.33 mg/mL (223.38 mM; Need ultrasonic)

	Solvent Concentration	Mass	1 mg	5 mg	10 mg
Preparing Stock Solutions	1 mM		6.7020 mL	33.5098 mL	67.0196 mL
	5 mM		1.3404 mL	6.7020 mL	13.4039 mL
	10 mM		0.6702 mL	3.3510 mL	6.7020 mL

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

BIOLOGICAL ACTIVITY

Description

DL-Penicillamine [(±)-Penicillamine] is a copper chelating agent. DL-Penicillamine has antidotal effects in thallotoxicosis rats when co-treated with [Prussian blue](#) (HY-106594A). DL-Penicillamine can cause pyridoxine deficiency and then induce optic axial neuritis. DL-Penicillamine can also depress primary immune response^{[1][2][3]}.

In Vivo

DL-Penicillamine (25 mg/kg; i.p.; twice daily, for 5 days) has antidotal effects in thallotoxicosis rats when co-treated with [Prussian blue](#) (HY-106594A)^[2].

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

Animal Model:	Male Wistar rats, NIH strain (intoxicated by i.p. injection of 32 mg/kg thallium (I) acetate) ^[2]
Dosage:	25 mg/kg
Administration:	i.p.; twice daily, for 5 days
Result:	Decreased slightly the thallium content in blood, organs and brain.

	Increased the probability survival when co-treated with Prussian blue (50 mg/kg; p.o.).
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REFERENCES

- [1]. TU J, BLACKWELL RQ, LEE PF. DL-penicillamine as a cause of optic axial neuritis. JAMA. 1963 Jul 13;185:83-6.
- [2]. Montes S, et al. Additive effect of DL-penicillamine plus Prussian blue for the antidotal treatment of thallotoxicosis in rats. Environ Toxicol Pharmacol. 2011 Nov;32(3):349-55.
- [3]. Huebner Kf, Gengozian N. Depression Of The Primary Immune Response By DL-Penicillamine. Proc Soc Exp Biol Med. 1965 Feb;118:561-5.
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Caution: Product has not been fully validated for medical applications. For research use only.

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