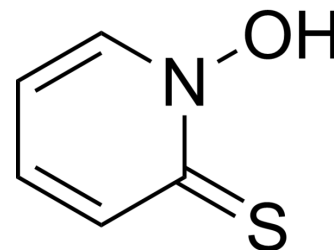


Pyrithione

Cat. No.:	HY-B1747
CAS No.:	1121-30-8
Molecular Formula:	C ₅ H ₅ NOS
Molecular Weight:	127.16
Target:	Bacterial; Fungal
Pathway:	Anti-infection
Storage:	Powder -20°C 3 years 4°C 2 years



* The compound is unstable in solutions, freshly prepared is recommended.

SOLVENT & SOLUBILITY

In Vitro

DMSO : 125 mg/mL (983.01 mM; Need ultrasonic)

Concentration	Solvent	Mass		
		1 mg	5 mg	10 mg
Preparing Stock Solutions	1 mM	7.8641 mL	39.3205 mL	78.6411 mL
	5 mM	1.5728 mL	7.8641 mL	15.7282 mL
	10 mM	0.7864 mL	3.9321 mL	7.8641 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: ≥ 2.08 mg/mL (16.36 mM); Clear solution
- Add each solvent one by one: 10% DMSO >> 90% (20% SBE-β-CD in saline)
Solubility: ≥ 2.08 mg/mL (16.36 mM); Clear solution
- Add each solvent one by one: 10% DMSO >> 90% corn oil
Solubility: ≥ 2.08 mg/mL (16.36 mM); Clear solution

BIOLOGICAL ACTIVITY

Description

Pyrrhithione, a Transition metal complex, is a zinc ionophore that causes increased zinc levels within mammalian cells. Pyrrhithione has potent bactericidal and anti-fungal activity^{[1][2]}.

CUSTOMER VALIDATION

- Front Mol Neurosci. 12 January 2022.

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- J Neurochem. 2021 Oct 26.

See more customer validations on www.MedChemExpress.com

REFERENCES

[1]. PANSY FE, et al. In vitro studies with 1-hydroxy-2(1H) pyridinethione. Proc Soc Exp Biol Med. 1953 Jan;82(1):122-4.

[2]. Nancy L Reeder, et al. Zinc pyrithione inhibits yeast growth through copper influx and inactivation of iron-sulfur proteins. Antimicrob Agents Chemother. 2011 Dec;55(12):5753-60.

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

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