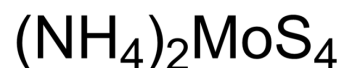


## Ammonium tetrathiomolybdate(VI)

Cat. No.:	HY-W076067
CAS No.:	15060-55-6
Molecular Formula:	H <sub>8</sub> MoN <sub>2</sub> S <sub>4</sub>
Molecular Weight:	260.27
Target:	Others; Cuproptosis
Pathway:	Others; Apoptosis
Storage:	4°C, protect from light * In solvent : -80°C, 6 months; -20°C, 1 month (protect from light)



### SOLVENT & SOLUBILITY

In Vitro	DMSO : 5 mg/mL (19.21 mM; Need ultrasonic)					
	H <sub>2</sub> O : < 0.1 mg/mL (ultrasonic) (insoluble)					
	Preparing Stock Solutions	Solvent Concentration	Mass	1 mg	5 mg	10 mg
			1 mM	3.8422 mL	19.2108 mL	38.4216 mL
			5 mM	0.7684 mL	3.8422 mL	7.6843 mL
10 mM			0.3842 mL	1.9211 mL	3.8422 mL	
Please refer to the solubility information to select the appropriate solvent.						
In Vivo	1. Add each solvent one by one: 50% PEG300 >> 50% PBS Solubility: 25 mg/mL (96.05 mM); Suspended solution; Need ultrasonic					
	2. Add each solvent one by one: 0.5% CMC-Na >> 0.5% Tween-80 Solubility: 6.25 mg/mL (24.01 mM); Suspended solution; Need ultrasonic					
	3. Add each solvent one by one: 10% DMSO >> 40% PEG300 >> 5% Tween-80 >> 45% saline Solubility: ≥ 0.5 mg/mL (1.92 mM); Clear solution					
	4. Add each solvent one by one: 10% DMSO >> 90% (20% SBE-β-CD in saline) Solubility: ≥ 0.5 mg/mL (1.92 mM); Clear solution					

### BIOLOGICAL ACTIVITY

Description	Ammonium tetrathiomolybdate(VI) is a copper chelator and also is a class of sulfide donor. Ammonium tetrathiomolybdate(VI) has neuroprotection effects. Ammonium tetrathiomolybdate(VI) can be used for the research of brain ischemia <sup>[1]</sup> .
In Vivo	Ammonium tetrathiomolybdate(VI) (ATTM) (i.v.; 10 mg/kg) confers significant neuroprotection <sup>[1]</sup> . MCE has not independently confirmed the accuracy of these methods. They are for reference only.

Animal Model:	Wistar Rats <sup>[1]</sup>
Dosage:	10 mg/kg
Administration:	Intravenous
Result:	Showed improved functional activity at both 24 h and 7-days post-reperfusion, in parallel with a significant reduction in infarct size.

## CUSTOMER VALIDATION

- Biomaterials. 2023 Jan;292:121945.
- Redox Biol. 2023 Dec, 68, 102952.

See more customer validations on [www.MedChemExpress.com](http://www.MedChemExpress.com)

## REFERENCES

[1]. Bruna Pescador Mendonça, et al. Neuroprotective effects of ammonium tetrathiomolybdate, a slow-release sulfide donor, in a rodent model of regional stroke. Intensive Care Med Exp. 2020 Apr 9;8(1):13.

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

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