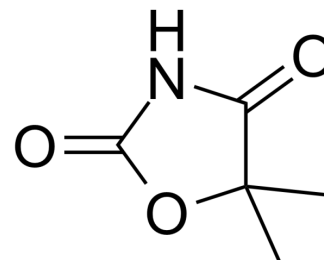


## Dimethadione

<b>Cat. No.:</b>	HY-B1348		
<b>CAS No.:</b>	695-53-4		
<b>Molecular Formula:</b>	C <sub>5</sub> H <sub>7</sub> NO <sub>3</sub>		
<b>Molecular Weight:</b>	129.11		
<b>Target:</b>	Drug Metabolite		
<b>Pathway:</b>	Metabolic Enzyme/Protease		
<b>Storage:</b>	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 (774.53 mM; Need ultrasonic)

Preparing Stock Solutions	Solvent Concentration	Mass		
		1 mg	5 mg	10 mg
	1 mM	7.7453 mL	38.7267 mL	77.4533 mL
	5 mM	1.5491 mL	7.7453 mL	15.4907 mL
	10 mM	0.7745 mL	3.8727 mL	7.7453 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 (19.36 mM); Clear solution
- Add each solvent one by one: 10% DMSO >> 90% (20% SBE-β-CD in saline)  
Solubility: ≥ 2.5 mg/mL (19.36 mM); Clear solution
- Add each solvent one by one: 10% DMSO >> 90% corn oil  
Solubility: ≥ 2.5 mg/mL (19.36 mM); Clear solution

### BIOLOGICAL ACTIVITY

#### Description

Dimethadione is the primary metabolite of trimethadione. Dimethadione causes depression of neuromuscular transmission. Dimethadione primarily decreases transmitter release from the nerve terminal<sup>[1]</sup>.

### REFERENCES

---

[1]. M T Alderdice, et al. Comparison of the effects of trimethadione and its primary metabolite dimethadione on neuromuscular function and the effects of altered pH on the actions of dimethadione.

---

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

Tel: 609-228-6898

Fax: 609-228-5909

E-mail: [tech@MedChemExpress.com](mailto:tech@MedChemExpress.com)

Address: 1 Deer Park Dr, Suite Q, Monmouth Junction, NJ 08852, USA