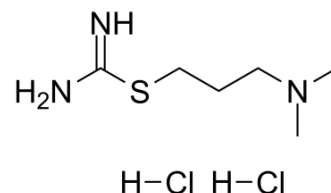


## Dimaprit dihydrochloride

Cat. No.:	HY-B1478
CAS No.:	23256-33-9
Molecular Formula:	C <sub>6</sub> H <sub>17</sub> Cl <sub>2</sub> N <sub>3</sub> S
Molecular Weight:	234.19
Target:	Histamine Receptor; NO Synthase
Pathway:	GPCR/G Protein; Immunology/Inflammation; Neuronal Signaling
Storage:	Please store the product under the recommended conditions in the Certificate of Analysis.



### BIOLOGICAL ACTIVITY

<b>Description</b>	Dimaprit dihydrochloride is a selective histamine H <sub>2</sub> receptor agonist, it also inhibits nNOS with an IC <sub>50</sub> of 49 μM. Dimaprit dihydrochloride can stimulate gastric acid secretion <sup>[1][2]</sup> .	
<b>IC<sub>50</sub> &amp; Target</b>	H <sub>2</sub> Receptor	nNOS 49 μM (IC <sub>50</sub> )
<b>In Vitro</b>	Dimaprit has less than 0.0001% the activity of histamine on H <sub>1</sub> -receptors <sup>[1]</sup> . Dimaprit (0.1 nM-100 μM) inhibits nNOS concentration dependently with an IC <sub>50</sub> of 49±14 μM <sup>[2]</sup> . MCE has not independently confirmed the accuracy of these methods. They are for reference only.	
<b>In Vivo</b>	Dimaprit stimulates gastric acid secretion in rats (1.25 μM/kg/min; rapid i.v. injection), cats (2-64 μM/h; i.v.) and dogs (1-100 nM/kg/min; i.v.) <sup>[1]</sup> . Dimaprit (0.01-1 μM/kg; i.v. at intervals of 5 min) causes dose-dependent falls in blood pressure in cats. Dimaprit (1-100 nM; intra-arterial injection) causes vasodilatation in the femoral vascular bed, and it (1 μM/kg; bolus or intravenous injection) has no effect on heart rate <sup>[1]</sup> . MCE has not independently confirmed the accuracy of these methods. They are for reference only.	

### REFERENCES

[1]. Parsons ME, et, al. Dimaprit -(S-[3-(N,N-dimethylamino)propyl]isothiourea) - a highly specific histamine H<sub>2</sub>-receptor agonist. Part 1. Pharmacology. Agents Actions. 1977 Mar; 7(1): 31-7.

[2]. Paquay JB, et, al. Nitric oxide synthase inhibition by dimaprit and dimaprit analogues. Br J Pharmacol. 1999 May; 127(2): 331-4.

---

**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