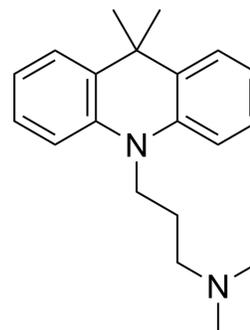


Dimetacrine

Cat. No.:	HY-B2075
CAS No.:	4757-55-5
Molecular Formula:	C ₂₀ H ₂₆ N ₂
Molecular Weight:	294.43
Target:	Others
Pathway:	Others
Storage:	Please store the product under the recommended conditions in the Certificate of Analysis.



BIOLOGICAL ACTIVITY

Description	Dimetacrine is a useful antidepressant effect, and can be used for the research of various types of depression.
In Vivo	<p>Dimetacrine is a useful antidepressant which can be used for the treatment of various types of depression. Dimetacrine in the highest concentration, 10 μM, decreases the contractile force to 36.5±9.1%. Dimetacrine, 0.3 μM, causes no statistically significant decline in contractile force from the controls. Tachycardia is observed after the administration of Dimetacrine, 1 to 3 mg/kg i.v., and the maximum response is obtained in dose of 3 mg/kg i.v.. The administration of Dimetacrine, 30 mg/kg i.v., causes an abrupt fall in blood pressure with tachycardia or bradycardia followed by cardiac arrest. Respiratory rate increases 40 min after the onset of infusion of Dimetacrine. Arterial blood pressure falls 50 min after the onset of infusion of Dimetacrine^[1].</p> <p>MCE has not independently confirmed the accuracy of these methods. They are for reference only.</p>

PROTOCOL

Animal Administration ^[1]	<p>Adult male mongrel dogs weighing 8 to 13 kg are used and anesthetized with sodium pentobarbital, 35 mg/kg i.v. Respiratory movement is measured by an accordion-type pneumograph placed around the thoraco-abdominal region and a pressure transducer. For the experiments on single i.v. injections, the increasing doses of Dimetacrine, 0.1, 0.3, 1, 3, 10 and 30 mg/kg i.v., until cardiac arrest occurs, are given into the cannulated left cephalic vein and are flushed with 1 mL of physiological saline. The changes in arterial blood pressure and heart rate caused by each dose are estimated for IMP, AMT and Dimetacrine^[1].</p> <p>MCE has not independently confirmed the accuracy of these methods. They are for reference only.</p>
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REFERENCES

[1]. Kato H, et al. Comparison of cardiovascular toxicities induced by dimetacrine, imipramine and amitriptyline in isolated guinea pig atria and anesthetized dogs. *Jpn J Pharmacol.* 1974 Dec;24(6):885-91.

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

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