Product Data Sheet

Phenacaine

Cat. No.: HY-B1726 CAS No.: 101-93-9 Molecular Formula: $C_{18}H_{22}N_2O_2$

Molecular Weight: 298.38

Target: Phosphodiesterase (PDE)

Pathway: Metabolic Enzyme/Protease

Storage: Please store the product under the recommended conditions in the Certificate of

Analysis.

BIOLOGICAL ACTIVITY

Description	Phenacaine (Holocaine) is a local anesthetic. Phenacaine inhibits the specific calmodulin-dependent stimulation of erythrocyte Ca^{2+} -ATPase and cyclic nucleotide phosphodiesterases from brain and heart ^{[1][2]} .
In Vitro	Phenacaine inhibits the specific calmodulin-dependent stimulation of erythrocyte Ca^{2^+} -ATPase (EC 3.6.1.3) and cyclic nucleotide phosphodiesterase (EC 3.1.4.17) in brain and heart tissues ^[1] . Phenacaine (1 μ M-1 mM) depresses glucose-induced insulin secretion by pancreas ^[2] . MCE has not independently confirmed the accuracy of these methods. They are for reference only.

REFERENCES

[1]. M Volpi, et al. Local anesthetics, mepacrine, and propranolol are antagonists of calmodulin. Proc Natl Acad Sci U S A. 1981 Feb;78(2):795-9.

[2]. R Bressler, et al. Effect of local anesthetics on insulin secretion by pancreas pieces. Diabetes. 1971 Nov;20(11):721-8.

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

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