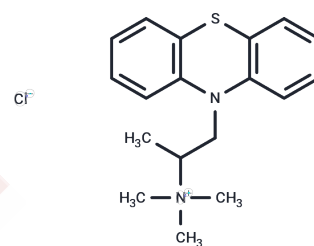


Thiazinamium chloride

Chemical Properties

| | |
|-------------------|---|
| CAS No. : | 4320-13-2 |
| Formula: | C ₁₈ H ₂₃ ClN ₂ S |
| Molecular Weight: | 334.91 |
| Storage: | Powder: -20°C for 3 years In solvent: -80°C for 1 year Actual storage temperature shall be subject to the COA. |



Biological Description

| | |
|----------------------------|--|
| Description | Thiazinamium chloride possesses potent anticholinergic and antiallergic activity and inhibits synthesis of Tx _{B2} (IC ₅₀ value of 0.2 μM). |
| Targets(IC ₅₀) | Others, Cholinesterase (ChE) |
| In vitro | thiazinamium chloride and promethazine inhibits Tx _{B2} synthesis by resting macrophages in a dose-dependent manner. Thiazinamium chloride inhibits Tx _{Bz} synthesis but had no effect on the ingestion of zymosan particles. In contrast, chlorpromazine inhibits phagocytosis but not Tx _{Bz} synthesis except at 10 ⁻³ M. Under the condition where indomethacin, a known cyclooxygenase inhibitor, is inhibitory, promethazine but not thiazinamium chloride inhibits Tx _{B2} synthesis from exogenous arachidonic acid. Treatment of macrophages with promethazine and chlorpromazine but not thiazinamium chloride results in a reduction in the oxidative burst during phagocytosis. Furthermore, the ability of thiazinamium chloride to selectively inhibit arachidonic acid metabolism may contribute to its bronchodilator/antiallergic activity. |

Preparing Stock Solutions

| | 1mg | 5mg | 10mg |
|-------|-----------|------------|------------|
| 1 mM | 2.9859 mL | 14.9294 mL | 29.8588 mL |
| 5 mM | 0.5972 mL | 2.9859 mL | 5.9718 mL |
| 10 mM | 0.2986 mL | 1.4929 mL | 2.9859 mL |
| 50 mM | 0.0597 mL | 0.2986 mL | 0.5972 mL |

Please select the appropriate solvent to prepare the stock solution, according to the solubility of the product in different solvents. Please use it as soon as possible.

Note: The dilution table applies only to solid products. For liquid products, please calculate the stock solution based on the stated concentration and/or density.

Reference

Chang J, et al. Effects of thiazinamium chloride, promethazine and chlorpromazine on thromboxane B2 synthesis, phagocytosis and respiratory burst by rat alveolar macrophages. *Biochem Pharmacol.* 1983 Sep 15;32(18):2671-7.

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