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Product Data Sheet

Piperilate

Cat. No.: HY-105790 CAS No.: 4546-39-8 Molecular Formula: $C_{21}H_{25}NO_3$

Molecular Weight: 339.43

Target: Cholinesterase (ChE)
Pathway: Neuronal Signaling

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

Analysis.

BIOLOGICAL ACTIVITY

Description

Piperilate (Pipethanate) is one of the mixtures of hetrazepine derivative PAF antagonists with anticholinergics, can be used for bronchial asthma research. Piperilate also causes hypotension and rescues mice poisoned by the organophosphates^{[1][2]} [3].

In Vivo

Piperilate (11.3 mg/kg, 29.42 mg/kg; i.p.; single dose) shows anticholinergic activity, and (30 mg/kg; i.p.; single dose) exerts efficacy in mice poisoned by the organophosphates [1].

Piperilate (1 mg/kg; i.v.) causes hypotension in rabbit which is not blocked by dichloroisoproterenol or <u>Atropine</u> (HY-B1205) [2].

Piperilate (3 mg/kg; i.v.) decreases respiration and heart rate of test rabbits, blocks the <u>Adrenaline</u> (HY-122304)-induced constriction of an isolated rabbit auricle preparation^[2].

 $\label{eq:mce} \mbox{MCE has not independently confirmed the accuracy of these methods. They are for reference only.}$

Animal Model:	Male albino mice (18-22 g) ^[1]
Dosage:	11.3 mg/kg, 29.42 mg/kg
Administration:	Intraperitoneal injection; single dose
Result:	Showed anticholinergic activity with EC ₅₀ values of 11.33 mg/kg (antagonism of oxotremorine induced salivation) and 29.42 mg/kg (antagonism of oxotremorine induced tremor) in mice.

REFERENCES

 $[1]. \ Faff J, et al. \ The rapeutic effects of some cholinolytics in organophosphate intoxications. Arch Toxicol. \ 1976 Oct \ 28; 36(2): 139-46.$

[2]. Tanaka S, et al. [Studies on pharmacological effect of pipethanate. II. Effect of pipethanate on respiration, circulation system and smooth muscle]. Eisei Shikenjo Hokoku. 1971;89:54-8. Japanese.

[3]. Heuer, et al. Synergistic combinations of PAF antagonists and anticholinergic agents as drugs for treatment of bronchial asthma: Germany, DE4219659. 1993-12-23.

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 $\label{lem:caution:Product} \textbf{Caution: Product has not been fully validated for medical applications. For research use only.}$

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