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ProductInformation

Antazoline phosphate salt

Product Number **A 3766**
Store at Room Temperature

Product Description

Molecular Formula: $C_{17}H_{19}N_3 \cdot H_3PO_4$
Molecular Weight: 363.4
CAS Number: 154-68-7
Melting Point: 194-198 °C[1]
λ_{max}: 242 nm (0.1 M HCl)[2]
Extinction Coefficient:
E^{mM} =
13.8 (242 nm, 0.1 M HCl)[2]
Synonyms: 4,5-dihydro-N-phenyl-N-(phenylmethyl)-1H-imidazole-2-methanamine phosphate; 2-(N-benzylanilinomethyl)-2-imidazoline phosphate; phenazoline phosphate[1]

Antazoline is an imidazole derivative that has antihistaminic properties.[1,3] It is used in ion channel research and in cardiovascular research. A review of the activities of antazoline and related compounds in the pharmacology of K^+ channel openers has been published.[4] The action of antazoline and other imidazolines on human blood platelet aggregation and adrenaline-induced platelet aggregation has been studied.[5]

The effect of antazoline on NMDA toxicity and current in cultured rat hippocampal neurons (10 μM) and in a rat model of status epilepticus (10 and 45 mg/kg) has been investigated.[6] An *in vivo* study in antazoline-treated rats and dogs has probed alterations in insulin secretion and glucose tolerance.[7] The modulation of monoamine oxidase activity by antazoline (IC_{50} 20.3 μM) has been examined.[8]

Precautions and Disclaimer

For Laboratory Use Only. Not for drug, household or other uses.

Preparation Instructions

This product is soluble in water (50 mg/ml), with heat as needed, yielding a slightly hazy, faint yellow solution.

References

1. The Merck Index, 12th Ed., Entry# 718.
2. J. Am. Pharm. Assoc. Sci. Ed., **44**, 762 (1955).
3. Martindale The Extra Pharmacopoeia, 31st ed., Reynolds, J. E. F., ed., Royal Pharmaceutical Society (London, England: 1996), p. 433.
4. Edwards, G., and Weston, A. H., Pharmacology of the potassium channel openers. Cardiovasc. Drugs Ther., **9 Suppl 2**, 185-193 (1995).
5. Petrusewicz, J., and Kaliszan, R., Blood platelet adrenoceptor: aggregatory and antiaggregatory activity of imidazoline drugs. Pharmacology, **33(5)**, 249-255 (1986).
6. Milhaud, D., et al., Neuroprotective activity of antazoline against neuronal damage induced by limbic status epilepticus. Neuroscience, **120(2)**, 475-484 (2003).
7. Berdeu, D., et al., Antazoline increases insulin secretion and improves glucose tolerance in rats and dogs. Eur. J. Pharmacol., **324(2-3)**, 233-239 (1997).
8. Raasch, W., et al., Modulation of MAO activity by imidazoline and guanidine derivatives. Ann. NY Acad. Sci., **881**, 313-331 (1999).

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