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ProductInformation

Terfenadine

Product Number **T 9652**
Storage Temperature 2-8 °C

Product Description

Molecular Formula: $C_{32}H_{41}NO_2$
Molecular Weight: 471.7
CAS Number: 50679-08-8
Melting point: 146.5-148.5 °C (acetone); may exist in three polymorphic forms with melting point ranges of 149-152 °C, 146-148 °C and 142-144 °C.[1]
λ_{max}: 260 nm (methanol, ethanol)[1]
Specific rotation = 0° (c = 1 in chloroform, 25 °C)
Synonyms: alpha-[4-(1,1-Dimethylethyl)phenyl]-4-(hydroxydiphenylmethyl)-1-piperidinebutanol; 1-(p-tert-butylphenyl)-4-[4'-(alpha-hydroxydiphenylmethyl)-1'-piperidyl]butanol; alpha-(p-tert-butylphenyl)-4-(alpha-hydroxy-alpha-phenylbenzyl)-1-piperidinebutanol; Seldane®

This compound is a histamine H1-receptor antagonist. It has the biological effect of being an antihistaminic.[1] Other Histamine H_1-receptor antagonists are chlorpheniramine, pyrilamine (also known as mepyramine) and triprolidine.

It blocks HERG (human ether-a-gogo-related gene) K^+ channels.[2] Using patch clamp techniques, it has been shown to inhibit the delayed rectifier potassium current (IK) of rat isolated ventricular myocytes with an IC_{50} value of 5.96 μM.[3]

Precautions and Disclaimer

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

Preparation Instructions

This compound is soluble in chloroform (50 mg/ml), yielding a clear, colorless solution. This compound is soluble at 30 °C in water (0.01 mg/ml), ethanol (37.8 mg/ml), methanol (37.5 mg/ml), hexane (0.34 mg/ml), 1 M hydrochloric acid (0.12 mg/ml), 0.1 M citric acid (1.1 mg/ml), and 0.1 M tartaric acid (0.45 mg/ml).[2]

References

1. The Merck Index, 12th ed., Entry# 9307.
2. Taglialatela, M., et al., Cardiac ion channels and antihistamines: possible mechanisms of cardiotoxicity. Clin. Exp. Allergy 29, 182 (1999).
3. Ohtani, H., et al., Inhibitory effects of the antihistamines epinastine, terfenadine, and ebastine on potassium currents in rat ventricular myocytes. J. Pharm. Pharmacol. 51, 1059 (1999).

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