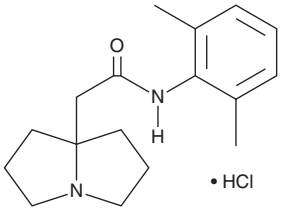
PRODUCT INFORMATION

Pilsicainide (hydrochloride)

Item No. 34242

CAS Registry No.: 88069-49-2
Formal Name: N-(2,6-dimethylphenyl)tetrahydro-1H-pyrrolizine-7a(5H)-acetamide, monohydrochloride
Synonym: SUN 1165
MF: $C_{17}H_{24}N_2O \bullet HCl$
FW: 308.9
Purity: ≥95%
Supplied as: A crystalline solid
Storage: -20°C
Stability: ≥4 years



Information represents the product specifications. Batch specific analytical results are provided on each certificate of analysis.

Laboratory Procedures

Pilsicainide (hydrochloride) is supplied as a crystalline solid. A stock solution may be made by dissolving the pilsicainide (hydrochloride) in the solvent of choice, which should be purged with an inert gas. Pilsicainide (hydrochloride) is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide (DMF). The solubility of pilsicainide (hydrochloride) in DMF is approximately 20 mg/ml and approximately 25 mg/ml in ethanol and DMSO.

Further dilutions of the stock solution into aqueous buffers or isotonic saline should be made prior to performing biological experiments. Ensure that the residual amount of organic solvent is insignificant, since organic solvents may have physiological effects at low concentrations. Organic solvent-free aqueous solutions of pilsicainide (hydrochloride) can be prepared by directly dissolving the crystalline solid in aqueous buffers. The solubility of pilsicainide (hydrochloride) in PBS (pH 7.2) is approximately 10 mg/ml. We do not recommend storing the aqueous solution for more than one day.

Description

Pilsicainide is a class Ic antiarrhythmic agent.[1,2] It shortens action potential duration in canine Purkinje fibers, as well as increases the ratio of the effective refractory period to the duration of action potential in guinea pig atrial muscle strips, when used at a concentration of 10 µg/ml.[1] Pilsicainide (3-10 mg/kg) restores sinus rhythm in a canine model of ventricular multifocal arrhythmias.[2] It also suppresses arrhythmias induced by ouabain or halothane and epinephrine in dogs. Formulations containing pilsicainide have been used in the treatment of supraventricular and ventricular tachycardia.

References

1. Hattori, Y., Inomata, N., Aisaka, K., *et al.* Electrophysiological actions of N-(2,6-dimethylphenyl)-8-pyrrolizidine-acetamide hydrochloride hemihydrate (SUN 1165), a new antiarrhythmic agent. *J. Cardiovasc. Pharmacol.* **8(5)**, 998-1002 (1986).
2. Aisaka, K., Hidaka, T., Inomata, N., *et al.* N-(2,6-Dimethylphenyl)-8-pyrrolizidineacetamide hydrochloride hemihydrate (SUN 1165): A new potent and long-acting antiarrhythmic agent. *Arzneimittelforschung* **35(8)**, 1239-1245 (1985).

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