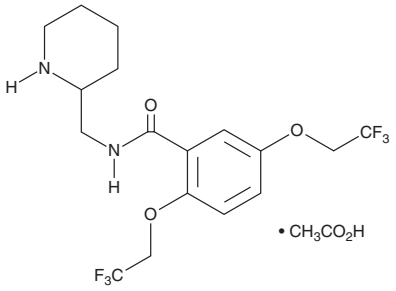
PRODUCT INFORMATION

Flecainide (acetate)

Item No. 20388

CAS Registry No.:	54143-56-5
Formal Name:	N-(2-piperidinylmethyl)-2,5-*bis*(2,2,2-trifluoroethoxy)-benzamide, monoacetate
MF:	$C_{17}H_{20}F_6N_2O_3 \bullet C_2H_4O_2$
FW:	474.4
Purity:	≥98%
UV/Vis.:	λ_{max}: 261 nm
Supplied as:	A crystalline solid
Storage:	-20°C
Stability:	≥2 years



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

Laboratory Procedures

Flecainide (acetate) is supplied as a crystalline solid. A stock solution may be made by dissolving the flecainide (acetate) in the solvent of choice, which should be purged with an inert gas. Flecainide (acetate) is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide (DMF). The solubility of flecainide (acetate) in ethanol is approximately 10 mg/ml and approximately 15 mg/ml in DMSO and DMF.

Flecainide (acetate) is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, flecainide (acetate) should first be dissolved in DMSO and then diluted with the aqueous buffer of choice. Flecainide (acetate) has a solubility of approximately 0.33 mg/ml in a 1:2 solution of DMSO:PBS (pH 7.2) using this method. We do not recommend storing the aqueous solution for more than one day.

Description

Flecainide is an inhibitor of cardiac late sodium current (I_{Na}; IC_{50} = 3.4 µM) and delayed-rectifier potassium current (I_{Kr}; IC_{50} = 1.5 µM).[1-3] Formulations containing flecainide have been used in the treatment of arrhythmias and sodium-dependent calcium overload associated with myocardial ischemia and heart failure.

References

1. Ramos, E. and O'Leary, M.E. State-dependent trapping of flecainide in the cardiac sodium channel. *J. Physiol.* **560(pt. 1)**, 37-49 (2004).
2. Belardinelli, Liu, L.G., Smith-Maxwell, C., *et al.* A novel, potent, and selective inhibitor of cardiac late sodium current suppresses experimental arrhythmias. *Journal of Pharmacology and Experimental Therapeutics* **344(1)**, 23-32 (2013).
3. Gutman, G.A., Chandy, K.G., Grissmer, S., *et al.* International Union of Pharmacology. LIII. Nomenclature and molecular relationships of voltage-gated potassium channels. *Pharmacological Reviews* **57(4)**, 473-508 (2005).

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