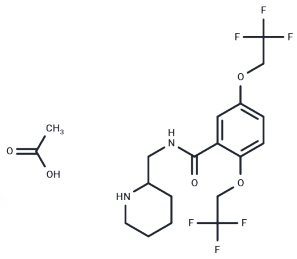
Data Sheet (Cat.No.T7219)

TargetMol

Flecainide acetate

Chemical Properties



CAS No. : 54143-56-5

Formula: C19H24F6N2O5

Molecular Weight: 474.39

Storage: Powder: -20°C for 3 years | In solvent: -80°C for 1 year
Actual storage temperature shall be subject to the COA.

Biological Description

Description	Flecainide acetate (R-818) is a class Ic antiarrhythmic agent used to prevent and treat tachyarrhythmias (abnormally fast heart rhythms).
Targets(IC50)	Sodium Channel
In vivo	Flecainide (acetate) is an effective antiarrhythmic agent, free of side effects and when used orally is capable of terminating and controlling relatively resistant supraventricular tachycardia in children[1].
Animal Research	A total of 8 infants were treated with flecainide for refractory tachyarrhythmia's. Diagnosis on electrocardiogram (ECG) was atrioventricular reentry tachycardia (AVRT) in 5, atrial ectopic tachycardia (AET) in 2, a combination of AVRT and atrioventricular nodal reentry tachycardia (AVNRT) in 1. All patients had failed trial of antiarrhythmic drugs prior to presentation: digoxin and propranolol in 7, amiodarone in 3, cardioversion in 1. Flecainide (80-130 mg/m(2) orally) resulted in termination of the tachycardia in all 8 patients. Acute pharmacological termination of arrhythmia occurred with oral flecainide loading in 1 and temporarily with intravenous esmolol loading in 1 patient. Adjuvant therapy in form of propranolol was used in 5 and digoxin in 2. There were no side effects noted. Four episodes of recurrence were noted in 3 patients over 2 years, all of which responded to dose increase. Mean follow up time is 24.75 months[1].

Solubility Information

Solubility	DMSO: 50 mg/mL (105.4 mM),Sonication is recommended. (< 1 mg/ml refers to the product slightly soluble or insoluble)
In vivo Formulation	10% DMSO+40% PEG300+5% Tween 80+45% Saline: 2 mg/mL (4.22 mM),Sonication is recommended. *Please add the solvents sequentially, clarifying the solution as much as possible before adding the next one. Dissolve by heating and/or sonication if necessary. Working solution is recommended to be prepared and used immediately. The formulation provided above is for reference purposes only. In vivo formulations may vary and should be modified based on specific experimental conditions.*

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	2.108 mL	10.5399 mL	21.0797 mL
5 mM	0.4216 mL	2.108 mL	4.2159 mL
10 mM	0.2108 mL	1.054 mL	2.108 mL
50 mM	0.0422 mL	0.2108 mL	0.4216 mL

Please select the appropriate solvent to prepare the stock solution, according to the solubility of the product in different solvents. Please use it as soon as possible.

Note: The dilution table applies only to solid products. For liquid products, please calculate the stock solution based on the stated concentration and/or density.

Reference

Kohli, Vikas. Oral flecainide is effective in management of refractory tachycardia in infants[J]. Indian Heart Journal, 2013, 65(2):168-171.

Jean-François Desaphy, Luca A D , Didonna M P , et al. Different flecainide sensitivity of hNav1.4 channels and myotonic mutants explained by state-dependent block[J]. The Journal of Physiology, 2004, 554(Pt 2):321-334.