Data Sheet (Cat.No.T0018)

TargetMol

Procainamide hydrochloride

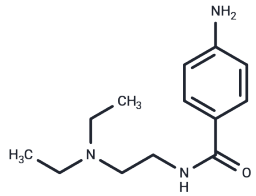
Chemical Properties

CAS No. : 614-39-1

Formula: C13H21N3O·HCl

Molecular Weight: 271.79

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	Procainamide Hydrochloride (Procapan) is the hydrochloride salt form of procainamide, an amide derivative exhibiting class 1A antiarrhythmic property and analog of procaine. Procainamide hydrochloride reversibly binds to and blocks activated (open) voltage-gated sodium channels, thereby blocks the influx of sodium ions into the cell, which leads to an increase in threshold for excitation and inhibit depolarization during phase 0 of the action potential.
Targets(IC50)	AChR,Autophagy,DNA Methyltransferase,Potassium Channel,Sodium Channel

Solubility Information

Solubility	DMSO: 45 mg/mL (165.57 mM),Sonication is recommended. H2O: 183.97 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: 2.5 mg/mL (9.2 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	3.6793 mL	18.3966 mL	36.7931 mL
5 mM	0.7359 mL	3.6793 mL	7.3586 mL
10 mM	0.3679 mL	1.8397 mL	3.6793 mL
50 mM	0.0736 mL	0.3679 mL	0.7359 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

Wojnarowska Z, et al. J Chem Phys. 2012 Apr 28;136(16):164507.