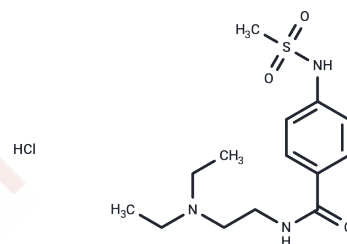


## Sematilide hydrochloride

## Chemical Properties

CAS No. :	101526-62-9
Formula:	C <sub>14</sub> H <sub>24</sub> ClN <sub>3</sub> O <sub>3</sub> S
Molecular Weight:	349.87
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	Sematilide hydrochloride (CK-1752) is a class III antiarrhythmic. It is a selectively delayed rectifier K <sup>+</sup> current (I <sub>Kr</sub> ) channel blocker. It inhibits rapidly activating I <sub>K</sub> in guinea pig atrial myocytes, resulting in the prolongation of refractoriness and action potential duration.
Targets(IC50)	Potassium Channel

## Solubility Information

Solubility	DMSO: 55 mg/mL (157.2 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: 1 mg/mL (2.86 mM), Sonication is recommended. <i>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.</i>

## Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	2.8582 mL	14.291 mL	28.582 mL
5 mM	0.5716 mL	2.8582 mL	5.7164 mL
10 mM	0.2858 mL	1.4291 mL	2.8582 mL
50 mM	0.0572 mL	0.2858 mL	0.5716 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

Yoshida H, et al. Comparison of the in vivo electrophysiological and proarrhythmic effects of amiodarone with those of a selective class III drug, sotalolol, using a canine chronic atrioventricular block model. *Circ J.* 2002 Aug; 66(8):758-62.

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