

Ibutilide Fumarate

Chemical Properties

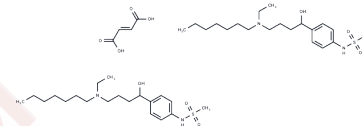
CAS No. : 122647-32-9

Formula: (C₂₀H₃₆N₂O₃S)₂·C₄H₄O₄

Molecular Weight: 885.23

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	Ibutilide Fumarate (U70226E) is the fumarate salt form of ibutilide, a class III antiarrhythmic agent. Ibutilide exerts its effect by activating a slow, inward, predominately sodium current rather than by blocking outward potassium currents. This results in prolongation of atrial and ventricular action potential duration and refractory periods. Ibutilide slightly decreases the sinus rate and atrioventricular (AV) conduction and produces a dose-related prolongation of the QT interval.
Targets(IC50)	Calcium Channel,Potassium Channel,Sodium Channel

Solubility Information

Solubility	H ₂ O: 50 mg/mL (56.48 mM),Sonication is recommended. DMSO: 50 mg/mL (56.48 mM),Sonication is recommended. (< 1 mg/ml refers to the product slightly soluble or insoluble)
In vivo Formulation	10% DMSO+90% Saline: 10 mg/mL (11.3 mM),Solution. 10% DMSO+40% PEG300+5% Tween 80+45% Saline: 2 mg/mL (2.26 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	1.1296 mL	5.6482 mL	11.2965 mL
5 mM	0.2259 mL	1.1296 mL	2.2593 mL
10 mM	0.113 mL	0.5648 mL	1.1296 mL
50 mM	0.0226 mL	0.113 mL	0.2259 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

Simon A, et al. *Europace*. 2016 Mar 22.

Ruan L, Quan X, Li L, Bai R, Ni M, Xu R, Zhang C. *Exp Ther Med*. 2014 May;7(5):1279-1284. Epub 2014 Mar 4.

Davies M R, Martinec M, Walls R, et al. Use of Patient Health Records to Quantify Drug-Related Pro-arrhythmic Risk [J]. *Cell Reports Medicine*. 2020, 1(5): 100076.

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