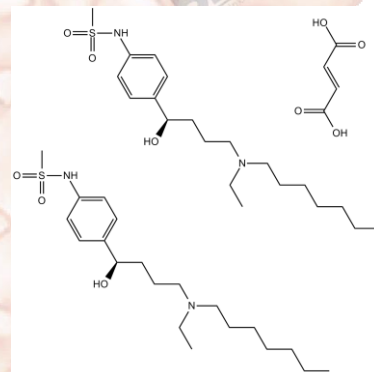


Product Data Sheet

Ibutilide Fumarate

Cat. No.:	B2278
CAS No.:	122647-32-9
Formula:	(C ₂₀ H ₃₆ N ₂ O ₃ S) ₂ ·C ₄ H ₄ O ₄
M.Wt:	885.23
Synonyms:	
Target:	Membrane Transporter/Ion Channel
Pathway:	Sodium Channel
Storage:	Store at -20°C



Solvent & Solubility

≥25.6 mg/mL in DMSO; ≥16.4 mg/mL in H₂O with ultrasonic; ≥2.69 mg/mL in EtOH with ultrasonic

	Solvent	Mass		
		1mg	5mg	10mg
In Vitro	Preparing Stock Solutions			
	1 mM	1.1296 mL	5.6482 mL	11.2965 mL
	5 mM	0.2259 mL	1.1296 mL	2.2593 mL
	10 mM	0.1130 mL	0.5648 mL	1.1296 mL

Please refer to the solubility information to select the appropriate solvent.

Biological Activity

Shortsummary

Class III antiarrhythmic agent

IC₅₀ & Target

In Vitro

Cell Viability Assay

Cell Line:	Neonatal rat cardiomyocytes
Preparation method:	The solubility of this compound in DMSO is >10 mM. General tips for obtaining a higher concentration: Please warm the tube at 37°C for 10 minutes and/or shake it in the ultrasonic bath for a while. Stock solution can be stored below -20°C for several months.
Reacting conditions:	10-8 to 10-3 mol/L for 4-12 h

	Applications:	Ibutilide protected against H ₂ O ₂ -induced cardiomyocytes injury through inhibiting endoplasmic reticulum and mitochondrial stress pathways.
In Vivo	Animal experiment	
	Animal models:	Open-chest beagles model
	Dosage form:	10 µg/kg, intravenous administration, for 10 min; 0.1 mg/kg/h
	Applications:	Ibutilide significantly decreased defibrillation threshold through the reduction of activation pattern complexity during ventricular fibrillation in canine hearts.
	Other notes:	Please test the solubility of all compounds indoor, and the actual solubility may slightly differ with the theoretical value. This is caused by an experimental system error and it is normal.

Product Citations

See more customer validations on www.apexbt.com.

References

1. Wang, Y., Wang, Y. L., Huang, X., Yang, Y., Zhao, Y. J., Wei, C. X. and Zhao, M. (2016) Ibutilide protects against cardiomyocytes injury via inhibiting endoplasmic reticulum and mitochondrial stress pathways. Heart Vessels
2. Jin, Q., Zhou, J., Zhang, N., Lin, C. J., Pang, Y., Gu, G., Shen, W. F. and Wu, L. Q. (2012) Ibutilide decreases defibrillation threshold by the reduction of activation pattern complexity during ventricular fibrillation in canine hearts. Chin Med J (Engl). 125, 2701-2707

Caution

FOR RESEARCH PURPOSES ONLY.

NOT FOR HUMAN, VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

Specific storage and handling information for each product is indicated on the product datasheet. Most APEX-BIO products are stable under the recommended conditions. Products are sometimes shipped at a temperature that differs from the recommended storage temperature. Short-term storage of many products are stable in the short-term at temperatures that differ from that required for long-term storage. We ensure that the product is shipped under conditions that will maintain the quality of the reagents. Upon receipt of the product, follow the storage recommendations on the product data sheet.



APEx BIO Technology

www.apexbt.com

7505 Fannin street, Suite 410, Houston, TX 77054.

Tel: +1-832-696-8203 | Fax: +1-832-641-3177 | Email: info@apexbt.com

