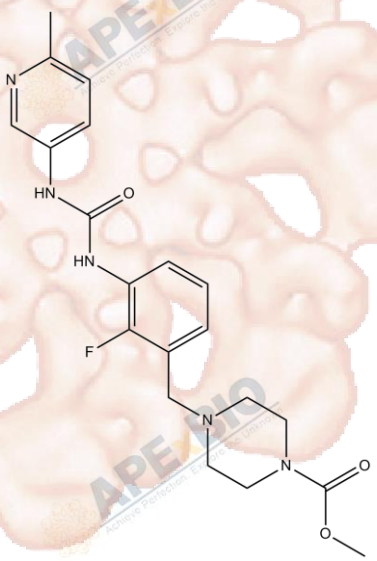
Product Data Sheet

Omecamtiv mecarbil

Cat. No.: A8349
CAS No.: 873697-71-3
Formula: C20H24FN5O3
M.Wt: 401.43
Synonyms: CK-1827452; CK1827452
Target: Membrane Transporter/Ion Channel
Pathway: ATPase
Storage: Store at -20°C



Solvent & Solubility

In Vitro

insoluble in H2O; ⩾15.13 mg/mL in EtOH; ⩾19.1 mg/mL in DMSO

Preparing Stock Solutions

Mass / Solvent / Concentration	1mg	5mg	10mg
1 mM	2.4911 mL	12.4555 mL	24.9109 mL
5 mM	0.4982 mL	2.4911 mL	4.9822 mL
10 mM	0.2491 mL	1.2455 mL	2.4911 mL

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

Biological Activity

Shortsummary	Cardiac myosin activator
IC_{50} & Target	

In Vitro

Cell Viability Assay

Cell Line:	Cardiac myocytes
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:	200 nM
	Applications:	Omecamtiv Mecarbil extended the duration of contraction without affecting the rates of contraction or relaxation. In addition, Omecamtiv Mecarbil also increased myocyte contraction in the presence of a β-adrenergic blocker, Carvedilol.
In Vivo	**Animal experiment**	
	Animal models:	Conscious and heart failure dogs
	Dosage form:	A bolus at 0.5 mg/kg, followed by infusion at 0.5 mg/kg per hr
	Applications:	In a conscious canine model, Omecamtiv Mecarbil improved left ventricular systolic function. In heart failure dogs, Omecamtiv Mecarbil significantly increased stroke volume and cardiac output.
	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]. Malik FI1, Hartman JJ, Elias KA, Morgan BP, Rodriguez H, Brejc K, Anderson RL, Sueoka SH, Lee KH, Finer JT, Sakowicz R, Baliga R, Cox DR, Garard M,Godinez G, Kawas R, Kraynack E, Lenzi D, Lu PP, Muci A, Niu C, Qian X, Pierce DW, Pokrovskii M, Suehiro I, Sylvester S, Tochimoto T, Valdez C, Wang W,Katori T, Kass DA, Shen YT, Vatner SF, Morgans DJ. Cardiac myosin activation: a potential therapeutic approach for systolic heart failure. Science. 2011 Mar 18;331(6023):1439-43.

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 APExBIO products are stable under the recommended conditions. Products are sometimes shipped at a temperature that differs from the recommended storage temperature. Shortterm 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.

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