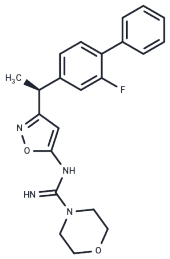
Data Sheet (Cat.No.T16752)

TargetMol

Rimacalib

Chemical Properties



CAS No. : 215174-50-8

Formula: C22H23FN4O2

Molecular Weight: 394.44

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	Rimacalib is an inhibitor of Ca2+/calmodulin-dependent protein kinase II (IC50s: ~1 μM for CaMKIIα and ~30 μM for CaMKIIγ).
Targets(IC50)	CaMK,Autophagy
In vitro	Higher Fura-2 transient amplitude after the pause upon Rimacalib vs. 37.2±4.3% in control and in parallel cardiomyocyte contractility (135.0±15.4% vs. 97.2±16% increase of twitch amplitude, p=0.098). Rimacalib improves (by ~40%) Ca2+-transient potentiation during the 30 s stimulation pause [1].

Solubility Information

Solubility	DMSO: 125 mg/mL (316.9 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: 3.3 mg/mL (8.37 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	2.5352 mL	12.6762 mL	25.3524 mL
5 mM	0.507 mL	2.5352 mL	5.0705 mL
10 mM	0.2535 mL	1.2676 mL	2.5352 mL
50 mM	0.0507 mL	0.2535 mL	0.507 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

Neef S, et al. Reduction of SR Ca2+ leak and arrhythmogenic cellular correlates by SMP-114, a novel CaMKII inhibitor with oral bioavailability. Basic Res Cardiol. 2017 Jul;112(4):45.