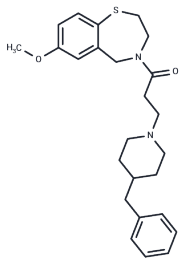
Data Sheet (Cat.No.T11731)

TargetMol

JTV-519 free base

Chemical Properties



CAS No. : 145903-06-6

Formula: C25H32N2O2S

Molecular Weight: 424.6

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	JTV-519 free base (K201 free base), known for its antiarrhythmic and cardioprotective properties, acts as a Ca2+-dependent blocker of sarcoplasmic reticulum Ca2+-stimulated ATPase (SERCA) and as a partial agonist of ryanodine receptors in striated muscle.
Targets(IC50)	FLT,Calcium Channel
In vitro	JTV-519 shows significant inhibition of Ca2+ movement due to annexin V, and 50% inhibition is achieved at 25 μM K201.JTV-519 inhibits inward Ca2+ movement into large unilamellar vesicles (LUV) caused by annexin V in a dose-dependent manner. In the presence of 50 nM annexin V and 400 μM Ca2+, 3 μM
In vivo	JTV-519 improves cardiac function in CLP mice, where the fractional shortening (FS) and ejection fraction (EF) are significantly increased as compared with CLP mice without JTV-519 treatment.

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	2.3552 mL	11.7758 mL	23.5516 mL
5 mM	0.471 mL	2.3552 mL	4.7103 mL
10 mM	0.2355 mL	1.1776 mL	2.3552 mL
50 mM	0.0471 mL	0.2355 mL	0.471 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

Darcy YL, et al. K201 (JTV519) is a Ca
Kaneko N, et al. Inhibition of annexin V-dependent Ca2+ movement in large unilamellar vesicles by K201, a new 1,4-benzothiazepine derivative. Biochim Biophys Acta. 1997 Nov 13;1330(1):1-7.
Yang J, et al. Toll-like receptor 4-induced ryanodine receptor 2 oxidation and sarcoplasmic reticulum Ca

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