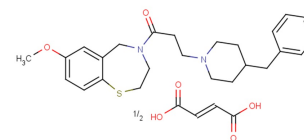


JTV-519 hemifumarate

Chemical Properties

CAS No.:	1435938-25-2
Formula:	C ₂₅ H ₃₂ N ₂ O ₂ S ₁ /2C ₄ H ₄ O ₄
Molecular Weight:	482.64
Appearance:	N/A
Storage:	0-4°C for short term (days to weeks), or -20°C for long term (months).



Biological Description

Description	JTV-519 hemifumarate, Antiarrhythmic and cardioprotective properties. is a Ca ²⁺ -dependent blocker of sarcoplasmic reticulum Ca ²⁺ -stimulated ATPase (SERCA) and a partial agonist of ryanodine receptors in striated muscle.
Targets(IC ₅₀)	Others: None
In vitro	JTV-519 inhibits inward Ca ²⁺ 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 Ca ²⁺ , 3 μM JTV-519 shows significant inhibition of Ca ²⁺ movement due to annexin V, and 50% inhibition is achieved at 25 μM K201.
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.

Solubility Information

Solubility	< 1 mg/ml refers to the product slightly soluble or insoluble
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Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	2.072 mL	10.36 mL	20.719 mL
5 mM	0.414 mL	2.072 mL	4.144 mL
10 mM	0.207 mL	1.036 mL	2.072 mL
50 mM	0.041 mL	0.207 mL	0.414 mL

Please select the appropriate solvent to prepare the stock solution, according to the solubility of the product in different solvents. The storage conditions and period of the stock solution: - 80 °C for 6 months; - 20 °C for 1 month. Please use it as soon as possible.

Reference

1. Darcy YL, et al. K201 (JTV519) is a Ca
2. 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.
3. Yang J, et al. Toll-like receptor 4-induced ryanodine receptor 2 oxidation and sarcoplasmic reticulum Ca

Inhibitors · Natural Compounds · Compound Libraries

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