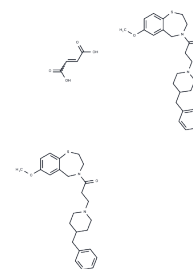


JTV-519 hemifumarate

Chemical Properties

| | |
|-------------------|---|
| CAS No. : | 1435938-25-2 |
| Formula: | C54H68N4O8S2 |
| Molecular Weight: | 965.28 |
| 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 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(IC50) | Calcium Channel, MELK |
| 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. |

Preparing Stock Solutions

| | 1mg | 5mg | 10mg |
|-------|-----------|-----------|------------|
| 1 mM | 1.036 mL | 5.1798 mL | 10.3597 mL |
| 5 mM | 0.2072 mL | 1.036 mL | 2.0719 mL |
| 10 mM | 0.1036 mL | 0.518 mL | 1.036 mL |
| 50 mM | 0.0207 mL | 0.1036 mL | 0.2072 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

Inhibitor · Natural Compounds · Compound Libraries · Recombinant Proteins

This product is for Research Use Only · Not for Human or Veterinary or Therapeutic Use

Tel:781-999-4286 E_mail:info@targetmol.com Address:34 Washington Street,Wellesley Hills,MA 02481