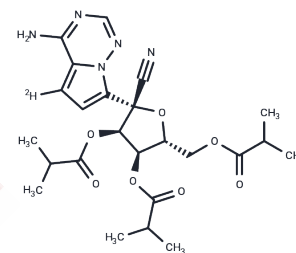


VV116

Chemical Properties

CAS No. : 2647442-33-7
 Formula: C₂₄H₃₀DN₅O₇
 Molecular Weight: 502.54
 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 | VV116 is a selective and orally active nucleoside antiviral agent against respiratory syncytial virus and SARS-CoV-2 infection.[1] |
| Targets(IC50) | RSV,SARS-CoV |
| In vitro | VV116 (JT001) (0-1000 μM) inhibits RSV replication in A549 cells with an EC50 of 1.20 μM, a CC50 of 95.92 μM, and a selectivity index (SI) of 80[2]. |
| In vivo | METHODS: Mice were infected with MHV and orally treated with different concentrations (25 mg/kg, 50 mg/kg, and 100 mg/kg) of VV116 (JT001), and disease symptoms, including changes in body weight and mortality, were monitored daily. RESULTS High-dose VV116 treatment effectively suppressed viral titers in vivo and alleviated weight loss caused by viral infection. [1] |

Solubility Information

| | |
|------------|---|
| Solubility | DMSO: 245 mg/mL (487.52 mM),Sonication is recommended. (< 1 mg/ml refers to the product slightly soluble or insoluble) |
|------------|---|

Preparing Stock Solutions

| | 1mg | 5mg | 10mg |
|-------|-----------|-----------|------------|
| 1 mM | 1.9899 mL | 9.9495 mL | 19.8989 mL |
| 5 mM | 0.398 mL | 1.9899 mL | 3.9798 mL |
| 10 mM | 0.199 mL | 0.9949 mL | 1.9899 mL |
| 50 mM | 0.0398 mL | 0.199 mL | 0.398 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

Liu W, et al. Remdesivir Derivative VV116 Is a Potential Broad-Spectrum Inhibitor of Both Human and Animal Coronaviruses. *Viruses*. 2023 Nov 23;15(12):2295.

Zhang R, et al. Oral remdesivir derivative VV116 is a potent inhibitor of respiratory syncytial virus with efficacy in mouse model. *Signal Transduct Target Ther*. 2022 Apr 16;7(1):123.

Inhibitor · Natural Compounds · Compound Libraries · Recombinant Proteins

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