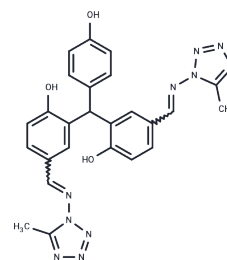


VP-14637

Chemical Properties

CAS No. :	235106-62-4
Formula:	C ₂₅ H ₂₂ N ₁₀ O ₃
Molecular Weight:	510.51
Storage:	Store at low temperature Powder: -20°C for 3 years In solvent: -80°C for 1 year <i>Actual storage temperature shall be subject to the COA.</i>



Biological Description

Description	VP-14637, also known as MDT 637, is a small-molecule respiratory syncytial virus inhibitor that exhibits potent antiviral activity with an EC ₅₀ value of 1.4 nM, VP-14637 inhibits viral fusion through defined molecular mechanisms, making it a valuable tool for antiviral drug research and mechanistic studies of RSV entry and replication.
Targets(IC ₅₀)	RSV
In vitro	In cellular assays, VP-14637 demonstrates broad-spectrum activity across various RSV genotypes. It inhibits viral replication in laboratory strains, such as RSV-A Long and RSV-A2, as well as in clinical isolates like RSV-Memphis-37. The observed IC ₅₀ values range from 0.36 to 3.4 ng/mL, with a mean IC ₅₀ of approximately 1.42 ng/mL [1].

Solubility Information

Solubility	DMSO: 100 mg/mL (195.88 mM), Sonication is recommended. (< 1 mg/ml refers to the product slightly soluble or insoluble)
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Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	1.9588 mL	9.7941 mL	19.5883 mL
5 mM	0.3918 mL	1.9588 mL	3.9177 mL
10 mM	0.1959 mL	0.9794 mL	1.9588 mL
50 mM	0.0392 mL	0.1959 mL	0.3918 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

Kim YI, et al. The antiviral effects of RSV fusion inhibitor, MDT-637, on clinical isolates, vs its achievable concentrations in the human respiratory tract and comparison to ribavirin. *Influenza Other Respir Viruses*. 2017 Nov;11(6):525-530.

Inhibitor · Natural Compounds · Compound Libraries · Recombinant Proteins

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