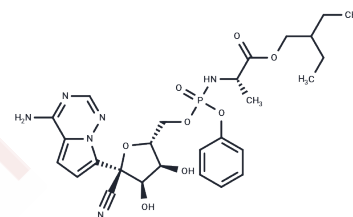


Remdesivir

Chemical Properties

CAS No. :	1809249-37-3
Formula:	C ₂₇ H ₃₅ N ₆ O ₈ P
Molecular Weight:	602.58
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	Remdesivir (GS-5734) is a nucleoside analog, a broad-spectrum antiviral compound that exerts its activity by inhibiting the RNA-dependent RNA polymerase of viruses. Remdesivir is active against Ebola, SARS, and MERS viruses, and is potentially therapeutic against COVID-19.
Targets(IC50)	DNA/RNA Synthesis,SARS-CoV
In vitro	METHODS: Mouse hepatitis virus (MHV)-infected DBT cells were incubated with Remdesivir (0.01-1 μM) for 24 h, and the supernatant was analyzed for viral titer by plaque assay. RESULTS: Remdesivir effectively inhibited MHV with an EC ₅₀ of 0.03 μM. [1] METHODS: 2019-nCoV-infected Vero E6 cells were treated with Remdesivir (0-400 μM) for 48 h. Viral yield in cell supernatants was detected using qRT-PCR. RESULTS: Remdesivir effectively blocked viral infection at low micromolar concentrations and showed high SI (EC ₅₀ = 0.77 μM; CC ₅₀ > 100 μM; SI > 129.87). [2]
In vivo	METHODS: To assay antiviral activity in vivo, Remdesivir (25 mg/kg, 12% sulfobutylether-β-cyclodextrin sodium salt in water (with HCl/NaOH) at pH 5.0) was injected subcutaneously into MERS-CoV-infected Ces1c ^{-/-} hDPP4 mice twice daily. RESULTS: Prophylactic Remdesivir reduced MERS-CoV replication and disease. [3] METHODS: To assay antiviral activity in vivo, Remdesivir (25 mg/kg once daily, administered three times) and Loratadine (10 mg/kg once daily, administered four times) were administered intraperitoneally to 501Y.V2 SARS-CoV-2 infected BALB/c mice. RESULTS: The combination of Remdesivir and the antihistamine Loratadine reduced SARS-CoV-2 replication and inflammation and protected against lung injury. [4]

Solubility Information

Solubility	DMSO: 240 mg/mL (398.29 mM),Sonication is recommended. (< 1 mg/ml refers to the product slightly soluble or insoluble)
In vivo Formulation	10% DMSO+40% PEG300+5% Tween 80+45% Saline: 12.5 mg/mL (20.74 mM),Suspension. <i>Please add the solvents sequentially, clarifying the solution as much as possible before adding the next one. Dissolve by heating and/or sonication if necessary. Working solution is recommended to be prepared and used immediately. The formulation provided above is for reference purposes only. In vivo formulations may</i>

In vivo Formulation	<i>vary and should be modified based on specific experimental conditions.</i>
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Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	1.6595 mL	8.2977 mL	16.5953 mL
5 mM	0.3319 mL	1.6595 mL	3.3191 mL
10 mM	0.166 mL	0.8298 mL	1.6595 mL
50 mM	0.0332 mL	0.166 mL	0.3319 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.

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