# Product Datasheet

## Technical Data

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|---|---|---|---|---|---|---|
| **Formula** | $C_{27}H_{35}N_6O_8P$ | | | | | |
| **Molecular Weight** | 602.58 | **CAS No.** | 1809249-37-3 | | | |
| **Solubility (25°C)*** | In vitro | DMSO | 100 mg/mL (165.95 mM) | | | |
| | | Ethanol | 16 mg/mL (26.55 mM) | | | |
| | | Water | Insoluble | | | |
| | *In vivo* (Add solvents to the product individually and in order) | Oral Administration | Homogeneous suspension | CMC-NA | ≥5mg/ml | Taking the 1 mL working solution as an example, add 5 mg of this product to 1 ml of CMC-Na solution, mix evenly to obtain a homogeneous suspension with a final concentration of 5 mg/ml. |

* <1 mg/ml means slightly soluble or insoluble.
* Please note that Capsid Bio tests the solubility of all compounds in-house, and the actual solubility may differ slightly from published values. This is normal and is due to slight batch-to-batch variations.
* Room temperature shipping (Stability testing shows this product can be shipped at 2-8°C for storage purposes.)

## Preparing Stock Solutions

| Concentration \ Volume / Mass | 1 mg | 5 mg | 10 mg |
|---|---|---|---|
| 1 mM | 1.6595 mL | 8.2977 mL | 16.5953 mL |
| 5 mM | 0.3319 mL | 1.6595 mL | 3.3191 mL |
| 10 mM | 0.1660 mL | 0.8298 mL | 1.6595 mL |
| 50 mM | 0.0332 mL | 0.1660 mL | 0.3319 mL |

## Biological Activity

| | |
|---|---|
| Description | Remdesivir (GS-5734), a monophosphoramidate prodrug of an adenosine analog, is an investigational broad-spectrum **antiviral** agent with in vitro activity against multiple RNA viruses, including Ebola and CoV. |
| In vitro | Remdesivir (GS-5734) exhibits antiviral activity against multiple variants of EBOV in cell-based assays (EC50=0.06-0.14 μM) and broad-spectrum antiviral activity in vitro against other pathogenic RNA viruses. [1]<br>This compound acts as a broad-spectrum therapeutic to protect against CoVs with EC50 of 0.03 μM for murine hepatitis virus in delayed brain tumor cells and 0.074 μM for SARS-CoV and MERS-CoV in HAE cells.[2] |
| In vivo | Regardless of the time of initiation, treatment with Remdesivir (GS-5734) at 3 mg/kg confers improved survival. All animals in which a 10 mg/kg regimen is initiated 3 days after virus exposure survive to the end of the in-life phase. However, the antiviral effects are consistently greater in animals administered repeated 10 mg/kg doses. The 10 mg/kg D3 (administered beginning 3 days after virus exposure) regimen is associated with amelioration of EVD-related clinical disease signs and markers of coagulopathy and end organ pathophysiology.[1] |

## Protocol (from reference)

**Cell Assay:**[1]

- **Cell lines**
  HeLa cells
- **Concentrations**
  0.14 uM
- **Incubation Time**
  72 h
- **Method**
  Cells were treated with various concentrations of Remdesivir (GS-5734).

**Animal Study:**[1]

- **Animal Models**
  Rhesus monkeys (Macaca mulatta)
- **Dosages**
  3 mg / kg, 10 mg / kg
- **Administration**
  IV

## References

https://pubmed.ncbi.nlm.nih.gov/26934220/ https://pubmed.ncbi.nlm.nih.gov/29511076/

### RETURN POLICY

Capsid Bio's Unconditional Return Policy ensures a smooth online shopping experience for our customers. If you are in any way unsatisfied with your purchase, you may return any item(s) within 7 days of receiving it. In the event of product quality issues, either protocol related or product related problems, you may return any item(s) within 365 days from the original purchase date. Please follow the instructions below when returning products.

### SHIPPING & STORAGE

Capsid Bio products are transported at room temperature. If you receive the product at room temperature, please rest assured, the Capsid Bio Quality Inspection Department has conducted experiments to verify that the normal temperature placement of one month will not affect the biological activity of powder products. After collecting, please store the product according to the requirements described in the datasheet. Most Capsid Bio products are stable under the recommended conditions.

**NOT FOR HUMAN, VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.**


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