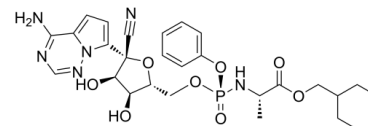


## Data Sheet

<b>Product Name:</b>	Remdesivir
<b>Cat. No.:</b>	CS-0028115
<b>CAS No.:</b>	1809249-37-3
<b>Molecular Formula:</b>	C <sub>27</sub> H <sub>35</sub> N <sub>6</sub> O <sub>8</sub> P
<b>Molecular Weight:</b>	602.58
<b>Target:</b>	DNA/RNA Synthesis; SARS-CoV
<b>Pathway:</b>	Anti-infection; Cell Cycle/DNA Damage
<b>Solubility:</b>	DMSO : 100 mg/mL (165.95 mM; Need ultrasonic)



### BIOLOGICAL ACTIVITY:

Remdesivir (GS-5734), a nucleoside analogue with effective antiviral activity, has **EC<sub>50</sub>s** of 3.3 μM, 4.7 μM, 32 μM, 3.7 μM and 9.2 μM for **SARS-CoV-2** and its variants alpha, beta, gamma and delta, respectively. Remdesivir is highly effective in the control of SARS-CoV-2 (COVID-19) infection in vitro<sup>[1][2][3]</sup>. IC<sub>50</sub> & Target:EC<sub>50</sub>: 30 nM (murine hepatitis virus, delayed brain tumor cell), 74 nM (SARS-CoV, HAE cell), 74 nM (MERS-CoV, HAE cell)<sup>[1]</sup>

EC<sub>50</sub>: 3.3 μM (SARS-CoV-2), 4.7 μM (SARS-CoV-2 alpha), 32 μM (SARS-CoV-2 beta), 3.7 μM (SARS-CoV-2 gamma) and 9.2 μM (SARS-CoV-2 delta)<sup>[3]</sup> **In Vitro:** Remdesivir (GS-5734) inhibits murine hepatitis virus (MHV) with an EC<sub>50</sub> of 30 nM, and blocks SARS-CoV and MERS-CoV in HAE cells with EC<sub>50</sub>s of both 74 nM in HAE cells after treatment for 24 h<sup>[1]</sup>.

### References:

[1]. Agostini ML, et al. Coronavirus Susceptibility to the Antiviral Remdesivir (GS-5734) Is Mediated by the Viral Polymerase and the Proofreading Exoribonuclease. MBio. 2018 Mar 6;9(2). pii: e00221-18.

[2]. Wang M, et al. Remdesivir and chloroquine effectively inhibit the recently emerged novel coronavirus (2019-nCoV) in vitro. Cell Res. 2020 Mar;30(3):269-271.

[3]. Hu H, et al. Optimization of the Prodrug Moiety of Remdesivir to Improve Lung Exposure/Selectivity and Enhance Anti-SARS-CoV-2 Activity. J Med Chem. 2022 Sep 22;65(18):12044-12054.

### CAIndexNames:

L-Alanine, N-[(S)-hydroxyphenoxyphosphinyl]-, 2-ethylbutyl ester, 6-ester with 2-C-(4-aminopyrrolo[2,1-f][1,2,4]triazin-7-yl)-2,5-anhydro-D-altrnonitrile

### SMILES:

C[C@H](N[P@@](OC1=CC=CC=C1)(OC[C@H]2O[C@@](C#N)(C3=CC=C4C(N)=NC=NN43)[C@H](O)[C@@H]2O)=O)C(OCC(CC)CC)=O

**Caution: Product has not been fully validated for medical applications. For research use only.**

Tel: 610-426-3128

Fax: 888-484-5008

E-mail: sales@ChemScene.com

Address: 1 Deer Park Dr, Suite Q, Monmouth Junction, NJ 08852, USA