# PRODUCT INFORMATION



**EIDD-1931** 

Item No. 9002958

CAS Registry No.: 3258-02-4 Formal Name: uridine, 4-oxime

β-D-N<sup>4</sup>-Hydroxycytidine, Synonyms:

N<sup>4</sup>-Hydroxycytidine

MF:  $C_9H_{13}N_3O_6$ 259.2 FW: ≥95% **Purity:** 

UV/Vis.:  $\lambda_{max}$ : 235, 275 nm Supplied as: A crystalline solid

Storage: -20°C Stability: ≥2 years

Information represents the product specifications. Batch specific analytical results are provided on each certificate of analysis.

### **Laboratory Procedures**

EIDD-1931 is supplied as a crystalline solid. A stock solution may be made by dissolving the EIDD-1931 in the solvent of choice, which should be purged with an inert gas. EIDD-1931 is soluble in organic solvents such as DMSO and dimethyl formamide. The solubility of EIDD-1931 in these solvents is approximately 20 and 10 mg/ml, respectively.

Further dilutions of the stock solution into aqueous buffers or isotonic saline should be made prior to performing biological experiments. Ensure that the residual amount of organic solvent is insignificant, since organic solvents may have physiological effects at low concentrations. Organic solvent-free aqueous solutions of EIDD-1931 can be prepared by directly dissolving the crystalline solid in aqueous buffers. The solubility of EIDD-1931 in PBS, pH 7.2, is approximately 10 mg/ml. We do not recommend storing the aqueous solution for more than one day.

# Description

EIDD-1931 is a ribonucleoside analog with antiviral activity.<sup>1-4</sup> It inhibits replication of severe acute respiratory syndrome coronavirus (SARS-CoV) in Vero 76 cells, Middle East respiratory syndrome coronavirus (MERS-CoV) in Calu-3 2B4 cells, and SARS-CoV-2 in Vero cells (IC<sub>50</sub>s =0.1, 0.15 and 0.3  $\mu$ M, respectively).<sup>3,4</sup> It also reduces viral titers of Venezuelan equine encephalitis virus (VEEV) TC-83 in infected Vero cells  $(EC_{50} = 0.426 \mu M)$  and wild-type and remdesivir-resistant strains of the model CoV mouse hepatitis virus (MHV) in infected DBT cells.<sup>2,4</sup> EIDD-1931 (100 and 400 mg/kg twice per day) reduces lung viral titers in mouse models of respiratory syncytial virus (RSV) and H1N1 influenza A virus infection.<sup>1</sup>

### References

- 1. Yoon, J.-J., Toots, M., Lee, S., et al. Orally efficacious broad-spectrum ribonucleoside analog inhibitor of influenza and respiratory syncytial viruses. Antimicrob. Agents Chemother. 62(8), e00766-18 (2018).
- Urakova, N., Kuznetsova, V., Crossman, D.K., et al. B-p-N<sup>4</sup>-Hydroxycytidine Is a potent anti-alphavirus compound that induces a high level of mutations in the viral genome. J. Virol. 92(3), e01965-17 (2018).
- Barnard, D.L., Day, C.W., Bailey, K., et al. Evaluation of immunomodulators, interferons and known in vitro SARS-coV inhibitors for inhibition of SARS-coV replication in BALB/c mice. Antivir. Chem. Chemother. 17(5), 275-784 (2006).
- 4. Sheahan, T.P., Sims, A.C., Zhou, S., et al. An orally bioavailable broad-spectrum antiviral inhibits SARS-CoV-2 in human airway epithelial cell cultures and multiple coronaviruses in mice. Sci. Transl. Med. 12:eabb5883 (2020).

WARNING
THIS PRODUCT IS FOR RESEARCH ONLY - NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

This material should be considered hazardous until further information becomes available. Do not ingest, inhale, get in eyes, on skin, or on clothing. Wash thoroughly after handling. Before use, the user must review the complete Safety Data Sheet, which has been sent via email to your institution.

### WARRANTY AND LIMITATION OF REMEDY

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