EIDD-1931
Item No. 9002958

CAS Registry No.: 3258-02-4
Formal Name: uridine, 4-oxime
Synonyms: β-D-N4-Hydroxycytidine, N4-Hydroxycytidine
MF: C9H13N3O6
FW: 259.2
Purity: ≥95%
UV/Vis.: \( \lambda_{\text{max}} \): 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.\(^1\) 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\(_{50}\) = 0.1, 0.15 and 0.3 μM, respectively).\(^3\) It also reduces viral titers of Venezuelan equine encephalitis virus (VEEV) TC-83 in infected Vero cells (EC\(_{50}\) = 0.426 μM) and wild-type and remdesivir-resistant strains of the model CoV mouse hepatitis virus (MHV) in infected DBT cells.\(^2,4\) 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.\(^1\)

References