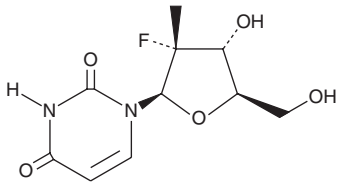
PRODUCT INFORMATION

PSI-6206

Item No. 18391

CAS Registry No.:	863329-66-2
Formal Name:	(2'R)-2'-deoxy-2'-fluoro-2'-methyl-uridine
Synonyms:	GS-331007, RO 2433
MF:	$C_{10}H_{13}FN_2O_5$
FW:	260.2
Purity:	≥98%
UV/Vis.:	λ_{max}: 261 nm
Supplied as:	A crystalline solid
Storage:	-20°C
Stability:	≥4 years



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

Laboratory Procedures

PSI-6206 is supplied as a crystalline solid. A stock solution may be made by dissolving the PSI-6206 in the solvent of choice, which should be purged with an inert gas. PSI-6206 is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide (DMF). The solubility of PSI-6206 in ethanol is approximately 25 mg/ml and approximately 20 mg/ml in DMSO and DMF.

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 PSI-6206 can be prepared by directly dissolving the crystalline solid in aqueous buffers. The solubility of PSI-6206 in PBS, pH 7.2, is approximately 10 mg/ml. We do not recommend storing the aqueous solution for more than one day.

Description

PSI-6206 is the deaminated derivative of PSI-6130, a selective inhibitor of hepatitis C virus (HCV) replication that targets the NS5B polymerase.[1,2] PSI-6206, itself, does not inhibit HCV replication in the HCV subgenomic replicon assay.[1,2] However, its triphosphate form, RO 2433-TP, does inhibit RNA synthesis by HCV polymerase (IC_{50} = 1.19 µM for inhibition of RNA synthesis activity of HCV replicase).[1,2]

References

1. Murakami, E., Niu, C., Bao, H., *et al.* The mechanism of action of β-D-2'-deoxy-2'-fluoro-2'-C-methylcytidine involves a second metabolic pathway leading to β-D-2'-deoxy-2'-fluoro-2'-C-methyluridine 5'-triphosphate, a potent inhibitor of the hepatitis C virus RNA-dependent RNA polymerase. *Antimicrob. Agents Chemother.* **52(2)**, 458-464 (2008).
2. Ma, H., Jiang, W.-R., Robledo, N., *et al.* Characterization of the metabolic activation of hepatitis C virus nucleoside inhibitor β-D-2'-Deoxy-2'-fluoro-2'-C-methylcytidine (PSI-6130) and identification of a novel active 5'-triphosphate species. *J. Biol. Chem.* **282(41)**, 29812-29820 (2007).

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