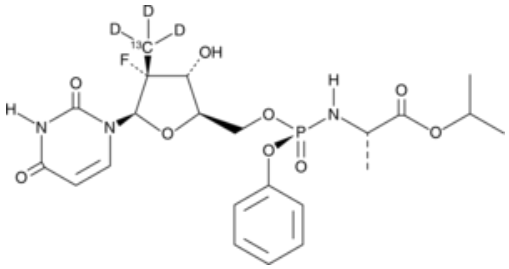
Product Data Sheet

Product Name: PSI-7977-13C-d3
Cat. No.: GC48006

Chemical Properties

Cas. No.	2070009-25-3		
SMILES	O=C(NC(C=C1)=O)N1[C@H]2[C@@](F)([13C]([2H])([2H])[2H])[C@H](O)[C@@H](CO[P@@](N[C@@H](C)C(OC(C)C)=O)(OC3=CC=CC=C3)=O)O2		
Formula	C21[13C]H26D3FN3O9P	M.Wt	533.5
Solubility	DMF: 20 mg/ml,DMSO: 20 mg/ml,Ethanol: 25 mg/ml,PBS (pH 7.2): 0.2 mg/ml	Storage	Store at -20°C
General tips	For obtaining a higher solubility , please warm the tube at 37 °C and shake it in the ultrasonic bath for a while.Stock solution can be stored below -20°C for several months.		
Shipping Condition	Evaluation sample solution : ship with blue ice All other available size: ship with RT , or blue ice upon request.		
Structure			

Background

PSI-7977-^{13}C-d$_3$ is intended for use as an internal standard for the quantification of PSI-7977 by GC- or LC-MS. PSI-7977 is a phosphoramidate prodrug of PSI-7851, a nucleoside analog that, when phosphorylated, inhibits the RNA-dependent RNA polymerase of hepatitis C virus (EC_{50} = 92 nM).[1,2,3] PSI-7977 is effective *in vitro* and *in vivo*.[2,4,5]

1.Murakami, E., Tolstykh, T., Bao, H., et al.Mechanism of activation of PSI-7851 and its diastereoisomer PSI-7977J. Biol. Chem.285(45)34337-34347(2010) 2.Sofia, M.J., Bao, D., Chang, W., et al.Discovery of a β-D-2'-deoxy-2'-α-fluoro-2'-β-C-methyluridine nucleotide prodrug (PSI-7977)

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for the treatment of hepatitis C virusJ. Med. Chem.53(19)7202-7218(2010) 3.Lam, A.M., Espiritu, C., Bansal, S., et al.Genotype and subtype profiling of PSI-7977 as a nucleotide inhibitor of hepatitis C virusAntimicrob. Agents Chemother.56(6)3359-3368(2012) 4.Gane, E.J., Stedman, C.A., Hyland, R.H., et al.Nucleotide polymerase inhibitor sofosbuvir plus ribavirin for hepatitis CN. Engl. J. Med.368(1)34-44(2013) 5.Lawitz, E., Mangia, A., Wyles, D., et al.Sofosbuvir for previously untreated chronic hepatitis C infectionN. Engl. J. Med.368(20)1878-1887(2013)