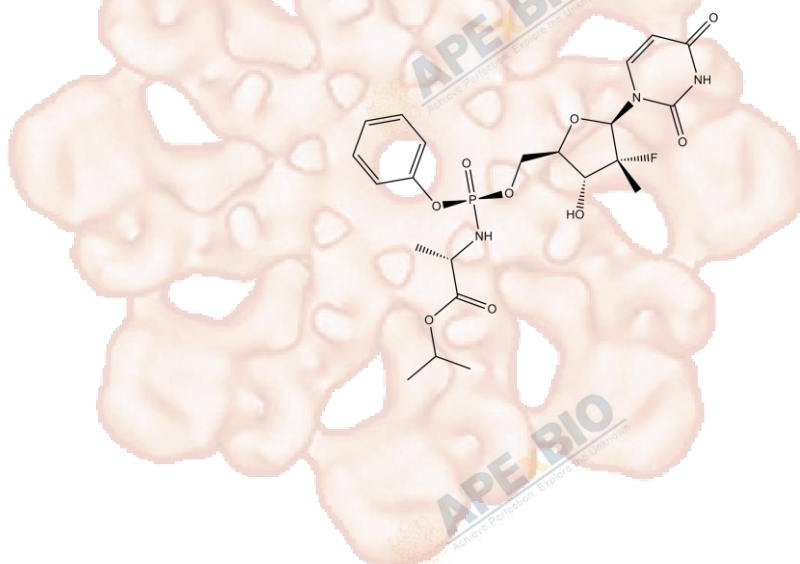


Product Data Sheet

PSI-7977

Cat. No.:	A3738
CAS No.:	1190307-88-0
Formula:	C22H29FN3O9P
M.Wt:	529.45
Synonyms:	PSI 7977;sofosbuvir
Target:	DNA Damage/DNA Repair
Pathway:	DNA Synthesis
Storage:	Store at -20°C



Solvent & Solubility

insoluble in H₂O; ≥ 183 mg/mL in DMSO; ≥ 84.4 mg/mL in EtOH with gentle warming

In Vitro

Preparing Stock Solutions	Solvent	Mass		
		1mg	5mg	10mg
	Concentration			
	1 mM	1.8888 mL	9.4438 mL	18.8875 mL
	5 mM	0.3778 mL	1.8888 mL	3.7775 mL
	10 mM	0.1889 mL	0.9444 mL	1.8888 mL

Please refer to the solubility information to select the appropriate solvent.

Biological Activity

Shortsummary

Antiviral agents for chronic HCV infection

IC₅₀ & Target

92 nM (EC50) (HCV RNA-dependent RNA polymerase)

In Vitro

Cell Viability Assay

Cell Line:	Non-infected Huh7.5.1 cells and JFH-1-infected Huh7.5.1 cells
Preparation method:	The solubility of this compound in DMSO is >183mg/mL. General tips for obtaining a higher concentration: Please warm the tube at 37 °C for 10 minutes and/or shake it in the ultrasonic bath for a while. Stock solution can be stored below -20°C for several months.
Reacting conditions:	24 hours

	Applications:	PSI-7977 prevented PKR activation/ phosphorylation in infected cells (5-6-fold decrease) and had no effect on the expression of inactive/non-phosphorylated PKR. It had no effect on the IFN-induced expression of non-phosphorylated and phosphorylated STAT1.
In Vivo	Animal experiment	
	Animal models:	TK-NOG mice with non-humanized (control) or humanized livers
	Dosage form:	Oral administration, 44 or 440 mg/kg/d, for 14 days
	Applications:	The average plasma ALT levels in mice with humanized livers in the 440- and 44-mg/kg/d treatment groups were below the upper limit of normal, and were not significantly different from those measured in vehicle-treated mice with humanized livers. The plasma lactate levels were also not elevated in or control mice or mice with humanized livers receiving either dose of PSI-7977.
	Other notes:	Please test the solubility of all compounds indoor, and the actual solubility may slightly differ with the theoretical value. This is caused by an experimental system error and it is normal.

Product Citations

See more customer validations on www.apexbt.com.

References

- [1] Bobardt M, Chatterji U, Lim P, et al. Both Cyclophilin Inhibitors and Direct-Acting Antivirals Prevent PKR Activation in HCV-Infected Cells. *The open virology journal*, 2014, 8: 1.
- [2] Xu D, Nishimura T, Nishimura S, et al. Fialuridine Induces Acute Liver Failure in Chimeric TK-NOG Mice: A Model for Detecting Hepatic Drug Toxicity Prior to Human Testing. *PLoS medicine*, 2014, 11(4): e1001628.

Caution

FOR RESEARCH PURPOSES ONLY.

NOT FOR HUMAN, VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

Specific storage and handling information for each product is indicated on the product datasheet. Most APEX BIO products are stable under the recommended conditions. Products are sometimes shipped at a temperature that differs from the recommended storage temperature. Short-term storage of many products are stable in the short-term at temperatures that differ from that required for long-term storage. We ensure that the product is shipped under conditions that will maintain the quality of the reagents. Upon receipt of the product, follow the storage recommendations on the product data sheet.

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