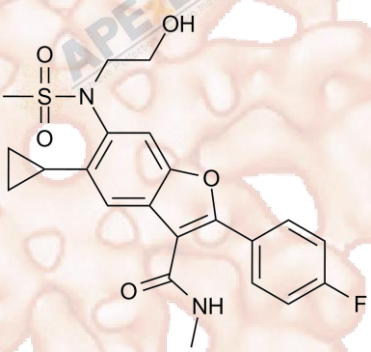
Product Data Sheet

Nesbuvir

Cat. No.:	A3655
CAS No.:	691852-58-1
Formula:	C22H23FN2O5S
M.Wt:	446.49
Synonyms:	HCV 796;HCV-796;HCV796,Nesbuvir
Target:	Proteases
Pathway:	HCV Protease
Storage:	Store at -20°C



Solvent & Solubility

In Vitro

⩾22.3 mg/mL in DMSO; insoluble in H2O; ⩾97.8 mg/mL in EtOH with gentle warming

Preparing Stock Solutions

Concentration \ Mass / Solvent	1mg	5mg	10mg
1 mM	2.2397 mL	11.1985 mL	22.3969 mL
5 mM	0.4479 mL	2.2397 mL	4.4794 mL
10 mM	0.2240 mL	1.1198 mL	2.2397 mL

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

Biological Activity

Shortsummary	NS5B polymerase inhibitor
IC_{50} & Target	

In Vitro

Cell Viability Assay

Cell Line:	Huh7-BB7 cells
Preparation method:	The solubility of this compound in DMSO is > 22.3 mg/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:	7 d, 40-80 nM

	Applications:	Nesbuvir is an inhibitor of the hepatitis C virus （HCV）nonstructural protein 5B (NS5B) polymerase. It has potent and specific inhibitory effect against the HCV RdRp, thus inhibiting RNA synthesis. When Nesbuvir is used in combination with boceprevir, it decreases the frequency with which resistant variants occur in Huh7-BB7 cells bearing a subgenomic genotype 1b HCV replicon.
In Vivo	**Animal experiment**	
	Animal models:	Urokinase plasminogen activator (uPA)/severe combined immunodeficient (SCID) mice
	Dosage form:	Oral administration, 50 mg/kg，three times daily for 5 days
	Applications:	Treating mice with Nesbuvir resulted in a 2.02 ± 0.55 log10 decrease of HCV titer with one mouse below the level of detection, whereas HCV levels in the control group of mice were relatively stable (0.26 ± 0.16 log10 decline).
	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]. Flint M, Mullen S, Deatly A M, et al. Selection and characterization of hepatitis C virus replicons dually resistant to the polymerase and protease inhibitors HCV-796 and boceprevir (SCH 503034)[J]. Antimicrobial agents and chemotherapy, 2009, 53(2): 401-411.
[2]. Kneteman N M, Howe A Y M, Gao T, et al. HCV796: a selective nonstructural protein 5B polymerase inhibitor with potent anti‐hepatitis C virus activity in vitro, in mice with chimeric human livers, and in humans infected with hepatitis C virus[J]. Hepatology, 2009, 49(3): 745-752.

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 APExBIO products are stable under the recommended conditions. Products are sometimes shipped at a temperature that differs from the recommended storage temperature. Shortterm 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.

APExBIO Technology
www.apexbt.com
7505 Fannin street, Suite 410, Houston, TX 77054.
Tel: +1-832-696-8203 | Fax: +1-832-641-3177 | Email: info@apexbt.com