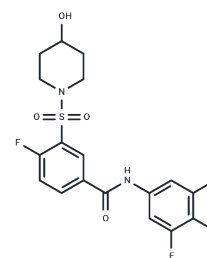


NVR 3-778

Chemical Properties

CAS No. : 1445790-55-5
 Formula: C₁₈H₁₆F₄N₂O₄S
 Molecular Weight: 432.39
 Storage: Powder: -20°C for 3 years | In solvent: -80°C for 1 year
Actual storage temperature shall be subject to the COA.



Biological Description

Description	NVR 3-778 is a first-in-class, orally bioavailable HBV CAM belonging to the SBA class, exhibiting anti-HBV activity.
Targets(IC50)	HBV
In vitro	NVR 3-778 inhibits the generation of infectious HBV DNA-containing virus particles with a mean antiviral (EC ₅₀ : 0.40 μM in HepG2.2.15 cells). NVR 3-778 inhibits pregenomic RNA encapsidation, viral replication, and the production of HBV DNA- and HBV RNA-containing particles. NVR 3-778 also inhibits de novo infection and viral replication in primary human hepatocytes with EC ₅₀ s of 0.81 μM against HBV DNA and between 3.7 μM and 4.8 μM against the production of HBV antigens and intracellular HBV RNA. NVR 3-778 targets HBV core protein and inhibits viral replication. NVR 3-778 has pan-genotypic antiviral activity and a lack of cross-resistance with nucleos(t)ide inhibitors of HBV replication. The EC ₅₀ values of NVR 3-778 are increased by 4.5-, 9.3-, and 15.8-fold in the presence of 10%, 20%, and 40% human serum, respectively.
In vivo	In dogs following oral administration, NVR 3-778 (1.5 mg/kg; i.g.) shows the mean C _{max} and AUC _{0-inf} values of 0.56 μg/ml and 3.50 μg·h/ml, respectively. And the mean oral bioavailability is determined to be 84.6%.

Solubility Information

Solubility	DMSO: 60 mg/mL (138.76 mM), Sonication is recommended. (< 1 mg/ml refers to the product slightly soluble or insoluble)
In vivo Formulation	10% DMSO+40% PEG300+5% Tween 80+45% Saline: 2 mg/mL (4.63 mM), Sonication is recommended. <i>Please add the solvents sequentially, clarifying the solution as much as possible before adding the next one. Dissolve by heating and/or sonication if necessary. Working solution is recommended to be prepared and used immediately. The formulation provided above is for reference purposes only. In vivo formulations may vary and should be modified based on specific experimental conditions.</i>

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	2.3127 mL	11.5636 mL	23.1273 mL
5 mM	0.4625 mL	2.3127 mL	4.6255 mL
10 mM	0.2313 mL	1.1564 mL	2.3127 mL
50 mM	0.0463 mL	0.2313 mL	0.4625 mL

Please select the appropriate solvent to prepare the stock solution, according to the solubility of the product in different solvents. Please use it as soon as possible.

Note: The dilution table applies only to solid products. For liquid products, please calculate the stock solution based on the stated concentration and/or density.

Reference

Lam AM, et al. Preclinical Characterization of NVR 3-778, a First-in-Class Capsid Assembly Modulator against Hepatitis B Virus. *Antimicrob Agents Chemother.* 2018 Dec 21;63(1).

Inhibitor · Natural Compounds · Compound Libraries · Recombinant Proteins

This product is for Research Use Only · Not for Human or Veterinary or Therapeutic Use

Tel:781-999-4286 E_mail:info@targetmol.com Address:34 Washington Street,Wellesley Hills,MA 02481