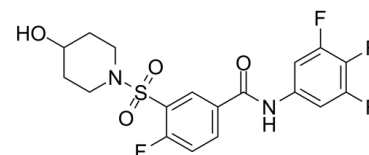


## Data Sheet

<b>Product Name:</b>	NVR 3-778
<b>Cat. No.:</b>	CS-0087065
<b>CAS No.:</b>	1445790-55-5
<b>Molecular Formula:</b>	C <sub>18</sub> H <sub>16</sub> F <sub>4</sub> N <sub>2</sub> O <sub>4</sub> S
<b>Molecular Weight:</b>	432.39
<b>Target:</b>	HBV
<b>Pathway:</b>	Anti-infection
<b>Solubility:</b>	DMSO : 250 mg/mL (578.18 mM; Need ultrasonic)



### BIOLOGICAL ACTIVITY:

NVR 3-778 is a first-in-Class and oral bioavailable **HBV CAM** (capsid assembly modulator) belonging to the SBA (sulfamoylbenzamide) class, with anti-HBV activity<sup>[1]</sup>. IC<sub>50</sub> & Target: HBV<sup>[1]</sup> **In Vitro:** NVR 3-778 targets HBV core protein and inhibits viral replication<sup>[1]</sup>.

NVR 3-778 inhibits the generation of infectious HBV DNA-containing virus particles with a mean antiviral with an EC<sub>50</sub> of 0.40 μM in HepG2.2.15 cells<sup>[1]</sup>.

NVR 3-778 exhibits pan-genotypic antiviral activity and a lack of cross-resistance with nucleos(t)ide inhibitors of HBV replication<sup>[1]</sup>. NVR 3-778 inhibits pregenomic RNA encapsidation, viral replication, and the production of HBV DNA- and HBV RNA-containing particles<sup>[1]</sup>.

NVR 3-778 also inhibits de novo infection and viral replication in primary human hepatocytes with EC<sub>50</sub>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<sup>[1]</sup>.

The EC<sub>50</sub> 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<sup>[1]</sup>.

**In Vivo:** NVR 3-778 (1.5 mg/kg; i.g.) displays the mean C<sub>max</sub> and AUC<sub>0-inf</sub> values of 0.56 μg/ml and 3.50 μg·h/ml, respectively, in dogs following oral administration. And the mean oral bioavailability is determined to be 84.6%<sup>[1]</sup>.

### References:

[1]. 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).

### CAIndexNames:

Benzamide, 4-fluoro-3-[(4-hydroxy-1-piperidinyl)sulfonyl]-N-(3,4,5-trifluorophenyl)-

### SMILES:

O=C(NC1=CC(F)=C(F)C(F)=C1)C2=CC=C(F)C(S(=O)(N3CCCC(O)CC3)=O)=C2

**Caution: Product has not been fully validated for medical applications. For research use only.**

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