HCV Protease

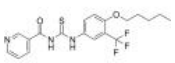
HCV NS3-4A serine protease is a complex composed of NS3 and its cofactor NS4A. It harbours serine protease as well as NTPase/RNA helicase activities and is essential for viral polyprotein processing, RNA replication and virion formation.

The HCV NS3/4A protease efficiently cleaves and inactivates two important signaling molecules in the sensory pathways that react to HCV pathogen-associated molecular patterns (PAMPs) to induce interferons (IFNs), i.e., mitochondrial antiviral signaling protein (MAVS) and Toll-IL-1 receptor domain-containing adaptor inducing IFN-β (TRIF). HCV infection is associated with chronic liver disease, including hepatic steatosis, fibrosis, cirrhosis, and hepatocellular carcinoma. The NS3-4A serine protease of HCV has been one of the most attractive targets for developing specific antiviral agents against HCV.

HCV Protease Inhibitors & Antagonists

ACH-806
(GS9132) Cat. No.: HY-19512

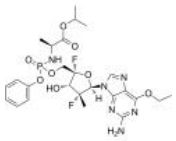
ACH-806 is an **NS4A** antagonist which can inhibit Hepatitis C Virus (**HCV**) replication with an **EC_{50}** of 14 nM.



Purity: >98%
Clinical Data: No Development Reported
Size: 1 mg, 5 mg

AL-611
Cat. No.: HY-145374

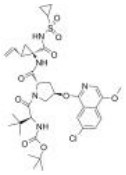
AL-611 is an **HCV NS5B** polymerase inhibitor (**EC_{50}** = 5 nM).



Purity: >98%
Clinical Data: No Development Reported
Size: 1 mg, 5 mg

Asunaprevir
(BMS-650032) Cat. No.: HY-14434

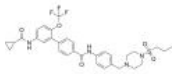
Asunaprevir (BMS-650032) is a potent and orally bioavailable **hepatitis C virus (HCV) NS3 protease** inhibitor, with **IC_{50}** of 0.2 nM-3.5 nM. Asunaprevir inhibits SARS-CoV-2 $3CL^{pro}$ activity.



Purity: 99.71%
Clinical Data: Launched
Size: 10 mM × 1 mL, 2 mg, 5 mg, 10 mg, 50 mg

AZD-7295
Cat. No.: HY-111087

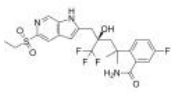
AZD-7295 is a **HCV NS5A** protein inhibitor, with an **EC_{50}** of 7 nM for GT-1b replicon.



Purity: >98%
Clinical Data: No Development Reported
Size: 1 mg, 5 mg

BI 653048
Cat. No.: HY-12946

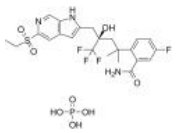
BI 653048 is a selective and orally active nonsteroidal **glucocorticoid (GC)** agonist with an **IC_{50}** value of 55 nM. BI 653048 inhibits CP1A2, CYP2D6, CYP2C9, CYP2C19 and CYP3A4 isoforms' activity and reduces affinity for the hERG ion channel (**IC_{50}**>30 μM).



Purity: >98%
Clinical Data: Phase 1
Size: 1 mg, 5 mg

BI 653048 phosphate
Cat. No.: HY-12946A

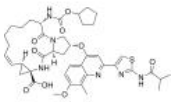
BI 653048 phosphate is a selective and orally active nonsteroidal **glucocorticoid (GC)** agonist with an **IC_{50}** value of 55 nM.



Purity: >98%
Clinical Data: Phase 1
Size: 1 mg, 5 mg

BI-1230
Cat. No.: HY-126973

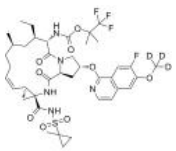
BI-1230 is potent and digit nanomolar inhibitor of **HCV NS3 protease** and of **viral replication**. BI-1230 is also highly selective against other serine/cysteine proteases. BI-1230 shows good Pharmacokinetic(PK) activity.



Purity: >98%
Clinical Data: No Development Reported
Size: 1 mg, 5 mg

BMS-986144
Cat. No.: HY-131905S

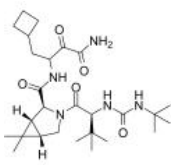
BMS-986144 is a third-generation, pan-genotype (GT) **NS3/4A protease** inhibitor. BMS-986144 inhibits HCV replicon with **EC_{50}**s of 2.3, 0.7, 1.0, 12, 8.0, and 5.8 nM for GT-1a, GT-1b, GT-2a, GT-3a, 1a R155X, and 1b D168V, respectively.



Purity: >98%
Clinical Data: No Development Reported
Size: 1 mg, 5 mg

Boceprevir
(EBP 520; SCH 503034) Cat. No.: HY-10237

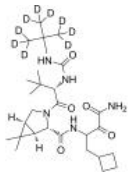
Boceprevir (EBP 520) is a potent, highly selective, orally bioavailable **HCV NS3 protease** inhibitor with a **K_i** of 14 nM in both enzyme assay and an **EC_{90}** of 350 nM in cell-based replicon assay. Boceprevir inhibits SARS-CoV-2 $3CL^{pro}$ activity.



Purity: 97.81%
Clinical Data: Launched
Size: 10 mM × 1 mL, 5 mg, 10 mg, 50 mg, 100 mg, 200 mg

Boceprevir-d9
(EBP 520-d9; SCH 503034-d9) Cat. No.: HY-10237S

Boceprevir-d9 (EBP 520-d9) is the deuterium labeled Boceprevir. Boceprevir (EBP 520) is a potent, highly selective, orally bioavailable **HCV NS3 protease** inhibitor with a **K_i** of 14 nM in both enzyme assay and an **EC_{90}** of 350 nM in cell-based replicon assay.

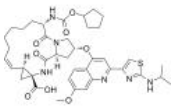


Purity: >98%
Clinical Data: No Development Reported
Size: 1 mg, 5 mg

Ciluprevir

(BILN 2061; BILN 2061ZW) Cat. No.: HY-10242

Ciluprevir(BILN 2061) is a specific and potent peptidomimetic inhibitor of the **HCV NS3 protease** with an IC_{50} of 3.0 nM.

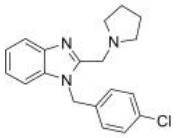


Purity: >98%
Clinical Data: No Development Reported
Size: 1 mg, 5 mg

Clemizole

Cat. No.: HY-30234

Clemizole is an **H1 histamine receptor** antagonist, is found to substantially inhibit **HCV** replication. Clemizole is an inhibitor of **TRPC5 channel**. The IC_{50} of Clemizole for RNA binding by **NS4B** is 24±1 nM, whereas its EC_{50} for viral replication is 8 μM.

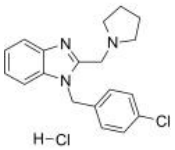


Purity: >98%
Clinical Data: Launched
Size: 1 mg, 5 mg

Clemizole hydrochloride

Cat. No.: HY-30234A

Clemizole hydrochloride is an **H1 histamine receptor** antagonist, is found to substantially inhibit **HCV** replication. Clemizole hydrochloride is an inhibitor of **TRPC5 channel**.

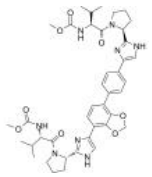


Purity: 99.99%
Clinical Data: Launched
Size: 10 mM × 1 mL, 5 mg, 10 mg, 50 mg, 100 mg

Coblopasvir

(KW-136) Cat. No.: HY-117411

Coblopasvir (KW-136) is a pangenotypic non-structural protein 5A **(NS5A)** inhibitor. Coblopasvir can be used for research of chronic hepatitis C virus infection.

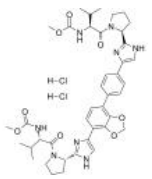


Purity: >98%
Clinical Data: No Development Reported
Size: 5 mg, 10 mg, 25 mg, 50 mg, 100 mg

Coblopasvir dihydrochloride

(KW-136 dihydrochloride) Cat. No.: HY-117411A

Coblopasvir (KW-136) dihydrochloride is a pangenotypic non-structural protein 5A **(NS5A)** inhibitor. Coblopasvir dihydrochloride can be used for research of chronic hepatitis C virus infection.

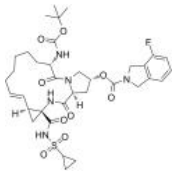


Purity: 98.45%
Clinical Data: No Development Reported
Size: 5 mg, 10 mg, 25 mg, 50 mg, 100 mg

Danoprevir

(ITMN-191; R7227; RO5190591; RG7227) Cat. No.: HY-10238

Danoprevir (ITMN-191) is an orally active **NS3/4A protease** inhibitor for hepatitis C virus (HCV) with an IC_{50} of 0.29 nM and is selective for NS3/4A over a panel of 53 proteases (IC_{50} higher than 10 μM).

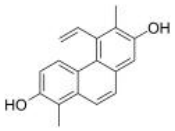


Purity: 98.04%
Clinical Data: Launched
Size: 10 mM × 1 mL, 5 mg, 10 mg, 50 mg, 100 mg

Dehydrojuncusol

Cat. No.: HY-N8188

Dehydrojuncusol, a potent **HCV** inhibitor, targets **HCV NS5A** and is able to inhibit RNA replication of replicons harboring resistance mutations to anti-NS5A direct-acting antivirals.

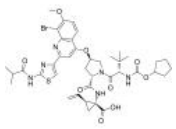


Purity: >98%
Clinical Data: No Development Reported
Size: 5 mg, 10 mg, 25 mg

Faldaprevir

(BI 201335) Cat. No.: HY-15256

Faldaprevir (BI 201335) is a potent, orally active and selective noncovalent inhibitor of **NS3/4A protease** of HCV (hepatitis C virus) genotypes 1a and 1b, with K_i values of 2.6 and 2.0 nM, respectively.

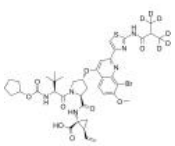


Purity: >98%
Clinical Data: Phase 3
Size: 1 mg, 5 mg

Faldaprevir-d6

Cat. No.: HY-15256S

Faldaprevir-d6 is deuterium labeled Faldaprevir.

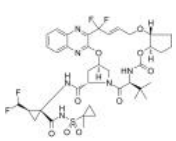


Purity: >98%
Clinical Data: No Development Reported
Size: 1 mg, 5 mg

Glecaprevir

(ABT-493) Cat. No.: HY-17634

Glecaprevir is a novel **HCV NS3/4A protease** inhibitor, with IC_{50} values ranging from 3.5 to 11.3 nM. Glecaprevir is also a **SARS-CoV 3CL^{pro}** inhibitor with an IC_{50} of 4.09 μM.

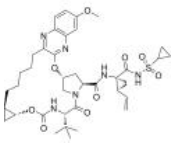


Purity: 99.93%
Clinical Data: Launched
Size: 10 mM × 1 mL, 5 mg, 10 mg, 25 mg, 50 mg, 100 mg

Grazoprevir

(MK-5172) Cat. No.: HY-15298

Grazoprevir (MK-5172) is a selective inhibitor of **Hepatitis C virus NS3/4a** protease with broad activity across genotypes and resistant variants, with K_is of 0.01 nM (gt1b), 0.01 nM (gt1a), 0.08 nM (gt2a), 0.15 nM (gt2b), 0.90 nM (gt3a), respectively.

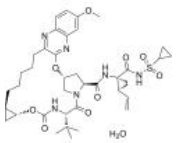


Purity: 99.98%
Clinical Data: Launched
Size: 10 mM × 1 mL, 5 mg, 10 mg, 50 mg, 100 mg

Grazoprevir hydrate

(MK-5172 hydrate) Cat. No.: HY-15298B

Grazoprevir hydrate (MK-5172 hydrate) is a selective inhibitor of **Hepatitis C virus NS3/4a** protease with broad activity across genotypes and resistant variants, with K_is of 0.01 nM (gt1b), 0.01 nM (gt1a), 0.08 nM (gt2a), 0.15 nM (gt2b), 0.90 nM (gt3a), respectively.

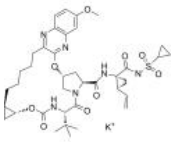


Purity: 99.10%
Clinical Data: Launched
Size: 10 mM × 1 mL, 5 mg, 10 mg, 50 mg, 100 mg

Grazoprevir potassium salt

(MK-5172 potassium salt) Cat. No.: HY-15298A

Grazoprevir potassium salt (MK-5172 potassium salt) is a selective inhibitor of **Hepatitis C virus NS3/4a** protease with broad activity across genotypes and resistant variants, with K_is of 0.01 nM (gt1b), 0.01 nM (gt1a), 0.08 nM (gt2a), 0.15 nM (gt2b), 0.90 nM (gt3a), respectively.

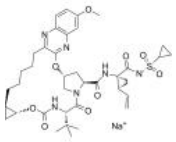


Purity: 99.40%
Clinical Data: Launched
Size: 10 mM × 1 mL, 5 mg, 10 mg, 50 mg, 100 mg

Grazoprevir sodium salt

(MK-5172 sodium salt) Cat. No.: HY-15298C

Grazoprevir sodium salt (MK-5172 sodium salt) is a selective inhibitor of **Hepatitis C virus NS3/4a** protease with broad activity across genotypes and resistant variants, with K_is of 0.01 nM (gt1b), 0.01 nM (gt1a), 0.08 nM (gt2a), 0.15 nM (gt2b), 0.90 nM (gt3a), respectively.

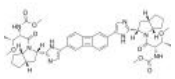


Purity: >98%
Clinical Data: Launched
Size: 1 mg, 5 mg

GSK2818713

Cat. No.: HY-145335

GSK2818713 is a novel Hepatitis C **NS5A** replication complex inhibitor.

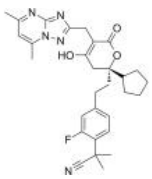


Purity: >98%
Clinical Data: No Development Reported
Size: 1 mg, 5 mg

HCVP-IN-1

Cat. No.: HY-50680

HCVP-IN-1 (compound 1) is a **hepatitis C viral polymerase (HCVP)** inhibitor.



Purity: >98%
Clinical Data: No Development Reported
Size: 1 mg, 5 mg

Hepatitis Virus C NS3 Protease Inhibitor 2

Cat. No.: HY-P2502

Hepatitis Virus C NS3 Protease Inhibitor 2 is a product-based peptide inhibitor of **hepatitis C virus (HCV) NS3 protease**, with a K_i of 41 nM.

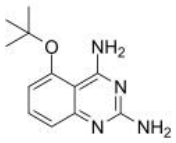
Ac-DE-{Dif}-E-{Cha}-C

Purity: >98%
Clinical Data: No Development Reported
Size: 1 mg, 5 mg

HZ-1157

Cat. No.: HY-109571

HZ-1157 inhibits **HCV NS3/4A protease** with an IC_{50} of 1.0 μmol/L. HZ-1157 (4a) has a high dengue virus inhibitory activity (EC_{50} = 0.15 μM) and is a relatively nontoxic (CC_{50} > 10 μM) dengue antiviral agent.

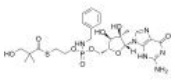


Purity: 98.75%
Clinical Data: No Development Reported
Size: 10 mM × 1 mL, 5 mg, 10 mg, 25 mg, 50 mg, 100 mg

IDX184

Cat. No.: HY-19558

IDX184 is a potent and orally bioavailable inhibitor of **HCV replication**. IDX184 potently inhibits **HCV polymerase** (IC_{50}=0.31 μM, K_i=52.3 nM).

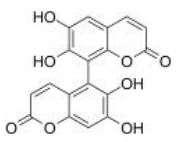


Purity: >98%
Clinical Data: No Development Reported
Size: 1 mg, 5 mg

Isoeuphorbetin

Cat. No.: HY-N7672

Isoeuphorbetin, a dimeric coumarin isolated from Viola philippica, is a potent **HCV protease** inhibitor with an IC_{50} of 3.63 μg/mL.

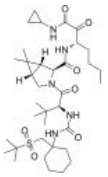


Purity: >98%
Clinical Data: No Development Reported
Size: 1 mg

Narlaprevir

(SCH 900518)

Cat. No.: HY-10300

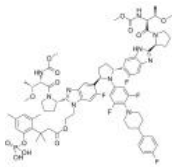


Narlaprevir (SCH 900518) is a selective and orally bioavailable **NS3 protease** inhibitor with a K_i value of 6 nM and an EC_{90} value of 40 nM. Narlaprevir also inhibits the **HCV nonstructural protein 3 serine protease**.

Purity: 98.15%
Clinical Data: Phase 3
Size: 10 mM × 1 mL, 10 mg, 50 mg, 100 mg

NS5A-IN-1

Cat. No.: HY-145375

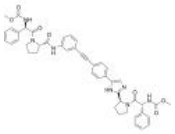


NS5A-IN-1 is a prodrug of the **HCV NS5A** inhibitor Pibrentasvir (ABT-530).

Purity: >98%
Clinical Data: No Development Reported
Size: 1 mg, 5 mg

NS5A-IN-2

Cat. No.: HY-115981

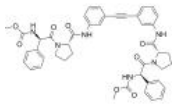


NS5A-IN-2 (Compound 33) is a potent inhibitor of **NS5A**. NS5A-IN-2 has extremely high potency against HCV genotype 1b, improved activity against genotype 3a (GT 3a) and good metabolic stability.

Purity: >98%
Clinical Data: No Development Reported
Size: 1 mg, 5 mg

NS5A-IN-3

Cat. No.: HY-115982

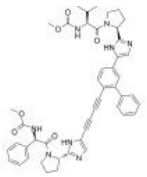


NS5A-IN-3 (Compound 15) is a potent inhibitor of **NS5A**. NS5A-IN-3 has extremely high potency against HCV genotype 1b, improved activity against genotype 3a (GT 3a) and good metabolic stability. NS5A-IN-3 exhibits a higher resistance barrier than daclatasvir against genotype 1b.

Purity: >98%
Clinical Data: No Development Reported
Size: 1 mg, 5 mg

NS5A-IN-4

Cat. No.: HY-146126



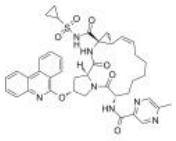
NS5A-IN-4 (Compound 1.12) is an orally active pan-genotypic **hepatitis C virus (HCV) NS5A** inhibitor with IC_{50} values of 1.2, 2296, 4.6, 362, 10.3 and 693 pM against **gT1b**, **gT1a**, **gT2a**, **gT3a**, **gT4a** and **gT5a**.

Purity: >98%
Clinical Data: No Development Reported
Size: 1 mg, 5 mg

Paritaprevir

(ABT-450; Ruprevir)

Cat. No.: HY-12594



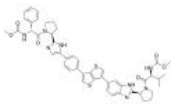
Paritaprevir (ABT-450) is a potent non-structural protein 3/4A (**NS3/4A**) protease inhibitor with EC_{50}s of 1 and 0.21 nM against **HCV** 1a and 1b, respectively. Paritaprevir is also a **SARS-CoV** $3CL^{pro}$ inhibitor with an IC_{50} of 1.31 μM.

Purity: 99.89%
Clinical Data: Launched
Size: 10 mM × 1 mL, 5 mg, 10 mg, 50 mg, 100 mg

Samatasvir

(IDX719; IDX18719)

Cat. No.: HY-16784



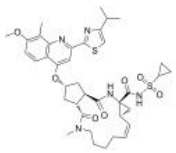
Samatasvir (IDX71) is a potent, orally active **NS5A** inhibitor of HCV replication. Samatasvir is effective and selective against infectious HCV and replicons, with EC_{50}s falling within a tight range of 2 to 24 pM in genotype 1 through 5 replicons.

Purity: 99.39%
Clinical Data: No Development Reported
Size: 5 mg, 10 mg, 25 mg, 50 mg, 100 mg

Simeprevir

(TMC435)

Cat. No.: HY-10241



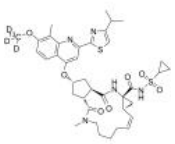
Simeprevir (TMC435) is an oral and potent **HCV NS3/4A protease** inhibitor with a K_i of 0.36 nM. Simeprevir inhibits HCV replication with an EC_{50} of 7.8 nM. Simeprevir inhibits SARS-CoV-2 $3CL^{pro}$ activity.

Purity: 99.46%
Clinical Data: Launched
Size: 10 mM × 1 mL, 5 mg, 10 mg, 25 mg, 50 mg, 100 mg

Simeprevir-13C,d3

(TMC435-13C,d3)

Cat. No.: HY-10241S



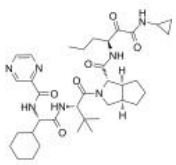
Simeprevir-13C,d3 (TMC435-13C,d3) is the 13C- and deuterium labeled Simeprevir. Simeprevir (TMC435) is an oral and potent **HCV NS3/4A protease** inhibitor with a K_i of 0.36 nM. Simeprevir inhibits HCV replication with an EC_{50} of 7.8 nM. Simeprevir inhibits SARS-CoV-2 $3CL^{pro}$ activity.

Purity: >98%
Clinical Data: No Development Reported
Size: 1 mg, 5 mg

Telaprevir

(VX-950)

Cat. No.: HY-10235



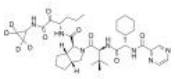
Telaprevir (VX-950) is a highly selective, reversible, and potent peptidomimetic inhibitor of the **HCV NS3-4A protease**, the steady-state inhibitory constant (K_i) of Telaprevir is 7 nM against a genotype 1 (H strain) NS3 protease domain plus a NS4A cofactor peptide.

Purity: 96.80%
Clinical Data: Launched
Size: 10 mM × 1 mL, 10 mg, 50 mg, 100 mg

Telaprevir-d4

(VX-950-d4) **Cat. No.:** HY-10235S

Telaprevir-d4 (VX-950-d4) is the deuterium labeled Telaprevir.

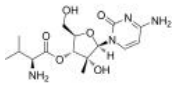


Purity: >98%
Clinical Data: No Development Reported
Size: 1 mg, 5 mg

Valopicitabine

(NM283) **Cat. No.:** HY-108060

Valopicitabine (NM283) is a nucleoside analog and the orally bioavailable prodrug of the potent anti-HCV agent 2'-C-methylcytidine (NM107). NM107competitively inhibits **NS5B polymerase**, causing chain termination.

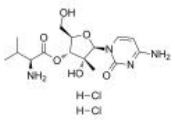


Purity: >98%
Clinical Data: Phase 2
Size: 5 mg, 10 mg, 25 mg, 50 mg, 100 mg

Valopicitabine dihydrochloride

(NM283 dihydrochloride) **Cat. No.:** HY-108060A

Valopicitabine (NM283) dihydrochloride is a nucleoside analog and the orally bioavailable prodrug of the potent anti-HCV agent 2'-C-methylcytidine (NM107). NM107competitively inhibits **NS5B** polymerase, causing chain termination.

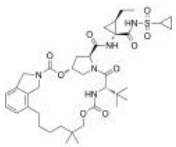


Purity: 98.68%
Clinical Data: No Development Reported
Size: 5 mg, 10 mg, 25 mg, 50 mg, 100 mg

Vaniprevir

(MK-7009) **Cat. No.:** HY-10243

Vaniprevir (MK-7009) is a non-covalent competitive inhibitor of the hepatitis C virus (HCV) **NS3/4A protease**.

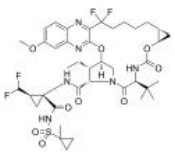


Purity: 99.60%
Clinical Data: Launched
Size: 1 mg, 5 mg

Voxilaprevir

(GS-9857) **Cat. No.:** HY-19840

Voxilaprevir (GS-9857) is a noncovalent, reversible inhibitor of **HCV NS3/4A protease** inhibitor (PI) with pangenotypic antiviral activity. Voxilaprevir inhibits genotype 1b and 3a wild-type NS3 proteases with K_i values of 0.038 nM and 0.066 nM, respectively.



Purity: 99.67%
Clinical Data: Launched
Size: 5 mg, 10 mg