

# Simeprevir

Catalog No: tcsc0338



## Available Sizes

**Size:** 5mg

**Size:** 10mg

**Size:** 50mg

**Size:** 100mg



## Specifications

**CAS No:**

923604-59-5

**Formula:**

$C_{38}H_{47}N_5O_7S_2$

**Pathway:**

Metabolic Enzyme/Protease;Anti-infection

**Target:**

HCV Protease;HCV

**Purity / Grade:**

>98%

**Solubility:**

DMSO : 14.29 mg/mL (19.05 mM; Need ultrasonic)

**Alternative Names:**

TMC435

**Observed Molecular Weight:**

749.94

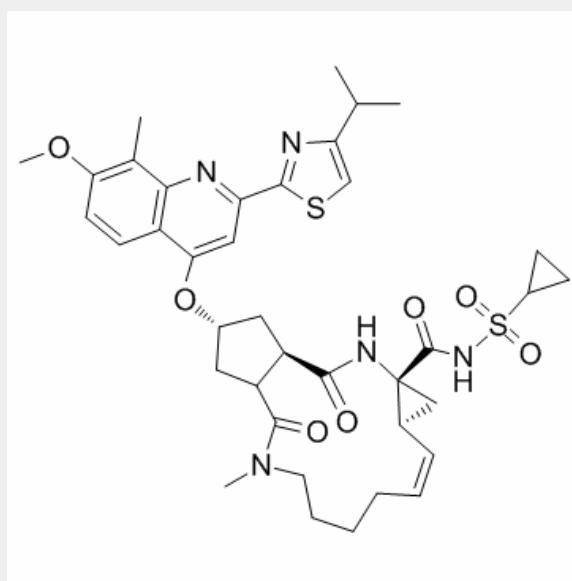
## Product Description

Simeprevir is a potent **HCV NS3/4A protease** inhibitor, and inhibits HCV replication with **EC<sub>50</sub>** of 8 nM.

IC50 & Target: EC50: 8 nM

**In Vitro:** In Huh7-Luc cells, antiviral activity of simeprevir (TMC435350) is dose dependent, and the EC<sub>50</sub> and EC<sub>90</sub> values determined for TMC435350 are 8 nM and 24 nM, respectively. Inhibition of TMC435350 on NS3/4A protease is time dependent, and the overall K<sub>i</sub>s are estimated to be 0.5 nM for genotype 1a and 0.4 nM for genotype 1b, respectively<sup>[1]</sup>. TMC435350 is a potent inhibitor of HCV NS3/4A protease (K<sub>i</sub>=0.36 nM) and viral replication (replicon EC<sub>50</sub>=7.8 nM)<sup>[2]</sup>.

**In Vivo:** In rats, TMC435350 (40 mg/kg, p.o.) is extensively distributed to the liver and intestinal tract (tissue/plasma area under the concentration-time curve ratios of >35), and the absolute bioavailability is 44%<sup>[1]</sup>.



All products are for RESEARCH USE ONLY. Not for diagnostic & therapeutic purposes!