

# Boceprevir

**Catalog No: tcsc0361**



## Available Sizes

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**Size:** 5mg

**Size:** 10mg

**Size:** 50mg

**Size:** 100mg

**Size:** 200mg



## Specifications

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**CAS No:**

394730-60-0

**Formula:**

$C_{27}H_{45}N_5O_5$

**Pathway:**

Metabolic Enzyme/Protease;Anti-infection

**Target:**

HCV Protease;HCV

**Purity / Grade:**

>98%

**Solubility:**

DMSO :  $\geq 10$  mg/mL (19.24 mM)

**Alternative Names:**

EBP 520;SCH 503034

**Observed Molecular Weight:**

519.68

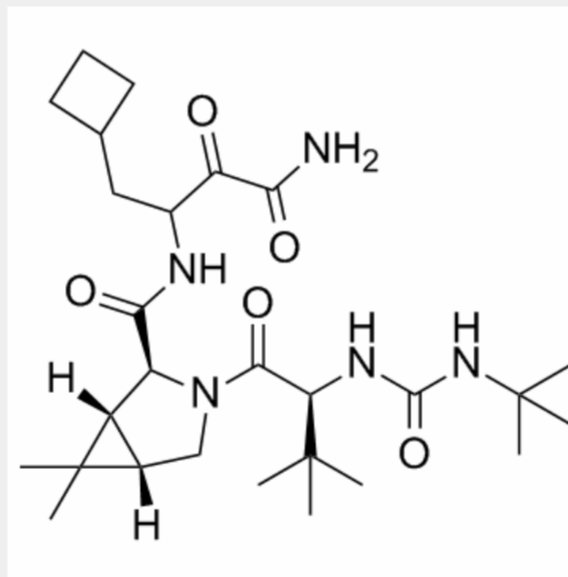
**Product Description**

Boceprevir is a novel, potent, highly selective, orally bioavailable **HCV NS3 protease** inhibitor with  $K_i$  of 14 nM in both enzyme assay and  $EC_{90}$  of 350 nM in cell-based replicon assay.

IC50 & Target:  $K_i$ : 14 nM (HCV NS3 protease)<sup>[1]</sup>

**In Vitro:** In the HCV NS3 protease continuous assay, Boceprevir (SCH 503034) has a potency of 14 nM ( $K_i$ ) average over a large number of runs. In the 72-h bicistronic subgenomic cell-based replicon assay in HuH-7 cells, the  $EC_{50}$  and  $EC_{90}$  values are determined to be 0.20  $\mu$ M and 0.35  $\mu$ M, respectively. Boceprevir is also found to be a very weak inhibitor of HNE ( $K_i=26 \mu$ M) representing a selectivity of 2200<sup>[1]</sup>.

**In Vivo:** Boceprevir, an HCV Protease Inhibitor for the Treatment of Hepatitis C Virus Infection. The pharmacokinetic profile of Boceprevir is evaluated in several animal species. Following oral administration, Boceprevir is moderately absorbed in rats (10 mg/kg), dogs (3 mg/kg), and monkeys (3 mg/kg). Absorption is relatively rapid in dogs but slower in mice (10 mg/kg), rats, and monkeys, as evidenced by mean absorption times (MAT) ranging from 0.5 to 1.4 h. The AUC is good in dogs and rats, moderate in mouse, and low in monkeys. The absolute oral bioavailability is modest in mouse, rats, and dogs (26-34%) but low in monkeys (4%)<sup>[1]</sup>. Boceprevir (100 mg/kg, orally) inhibit HCV NS3/4A protease activity in triple-transgenic mice<sup>[2]</sup>.



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