

Catalog	Unit
TBI5087-5MG	5 mg
TBI5087-25MG	25 mg

### Product Details

**Formal Name:** (1R,2S,5S)-N-[3-amino-1-(cyclobutylmethyl)-2,3-dioxopropyl]-3-[(2S)-2-[[[(1,1-dimethylethyl)amino]carbonyl]amino]-3,3-azabicyclo[3.1.0]hexane-2-carboxamide

**Alternate Names:** SCH 503034

**Molecular Formula:** C<sub>27</sub>H<sub>45</sub>N<sub>5</sub>O<sub>5</sub>

**Formula Weight:** 519.7

**CAS Number:** 394730-60-0

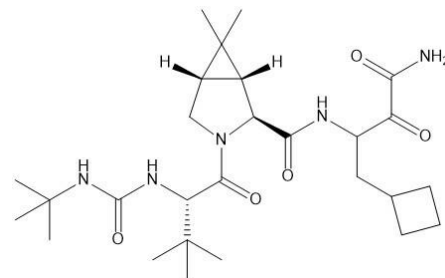
**Purity:** >98%

**Formulation:** powder

**Solubility:** Soluble in DMSO (up to at least 15 mg/ml); or Ethanol (25 mg/ml)

**Storage:** -20°C

**Stability:** ≥ 2 years.



### Applications

Antiviral; SARS-CoV-2 Mpro inhibitor

### Functions

Boceprevir directly inhibits Hepatitis C virus (HCV) NS3 protease (overall binding constant for formation of covalent adduct,  $K_i^* = 14$  nM; initial inhibition constant  $K_i = 7.8$   $\mu$ M). This blocks NS3 autoactivation, and subsequent cleavage and maturation of other viral proteins necessary for replisome assembly. This reversible, slow-binding ketoamide also restores host interferon signaling obstructed by HCV, thus reactivating the immune response. Recently, it was also found to inhibit the key SARS-CoV-2 protease, Mpro (3CLpro) in vitro ( $K_i = 1.18$   $\mu$ M) and in cells ( $EC_{50} = 1.9$   $\mu$ M, virus-induced cytopathic effects (CPE)

### Application Procedures

First dissolved in DMSO (up to at least 15 mg/ml); or Ethanol (25 mg/ml), then diluted to aqueous buffer. Solutions in DMSO may be stored at -20°C for up to 3 months.

**For research use only.**