

Telaprevir (VX-950)

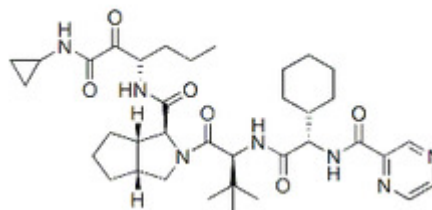
Catalog #: 27051

Lot #: 130909

Size: 5 mg

Structure:

CAS Registry #: 402957-28-2



Purity: ≥ 98%

Chemical Formula: C₃₆H₅₃N₇O₆

Molecular Weight: 679.85

Description: Telaprevir inhibits the hepatitis C virus NS3-4A serine protease, leading to the block of viral polyprotein processing. This eventually leads to a decrease of viral RNA replication, HCV RNA levels, as well as and protein levels in the Con1 (genotype 1b) subgenomic HCV replicon cells. This occurs in a time- and dose-dependent manner.

Appearance: White to off-white solid or powder.

Solubility: Soluble in DMSO at >100 mg/ml, and poorly soluble in ethanol and H₂O.

Biological Activity: Telaprevir shows a significant time-dependent increase in inhibitory effect on the replication of HCV RNA with IC₅₀ values of 574 nM, 488 nM, 210 nM and 139 nM for 24, 48, 72 and 120 hours incubation, respectively. On average it displays an IC₅₀ of 354 nM and an average IC₉₀ of 830 nM, respectively, from three independent experiments using 48 hours incubation.

Storage/Stability: Room temperature for 24 months as powder, +4 °C for 2 weeks in DMSO, or -70 °C for 6 months in anhydrous DMSO. Keep DMSO stock solutions out of contact with air. Protect from moisture.

Quality Control: The purity was determined by HPLC.

References:

1. Lin, K., *et al.*, *Antimicrob Agents Chemother.*; **50(5)**,1813-1822 (2006).
2. Ohara, E., *et al.*, *J. Hepatol* ; **54(5)**: 872-878 (2011).