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# Asunaprevir

National Cancer Institute

## Source

National Cancer Institute. *Asunaprevir*. NCI Thesaurus. Code C114982.

An orally bioavailable inhibitor of the nonstructural protein 3 (NS3), with potential activity against hepatitis C virus (HCV). Upon administration, asunaprevir binds to the active center of the HCV NS3 and prevents NS3 protease-mediated polyprotein maturation. This disrupts the processing of viral proteins required for HCV replication. NS3, a serine protease, is essential for the proteolytic cleavages within the HCV polyprotein and plays a key role during HCV viral RNA replication. HCV is a small, enveloped, single-stranded RNA virus belonging to the Flaviviridae family.