Asunaprevir

Item No. 20835

CAS Registry No.: 630420-16-5
Formal Name: (1R,2S)-N-[(1,1-dimethylethoxy)carbonyl]-3-methyl-L-valyl-(4R)-4-[(7-chloro-4-methoxy-1-isoquinolinyl)oxy]-L-prolyl-1-amino-N-(cyclopropylsulfonyl)-2-ethenyl-cyclopropanecarboxamide
Synonym: BMS 650032
MF: C_{35}H_{46}ClN_{5}O_{9}S
FW: 748.3
Purity: ≥98%
UV/Vis.: \( \lambda_{\text{max}} \): 254, 305, 333 nm
Supplied as: A crystalline solid
Storage: -20°C
Stability: As supplied, 2 years from the QC date provided on the Certificate of Analysis, when stored properly

Laboratory Procedures

Asunaprevir is supplied as a crystalline solid. A stock solution may be made by dissolving the asunaprevir in the solvent of choice. Asunaprevir is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide (DMF), which should be purged with an inert gas. The solubility of asunaprevir in these solvents is approximately 15, 25, and 30 mg/ml, respectively.

Asunaprevir is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, asunaprevir should first be dissolved in DMF and then diluted with the aqueous buffer of choice. Asunaprevir has a solubility of approximately 0.2 mg/ml in a 1:4 solution of DMF:PBS (pH 7.2) using this method. We do not recommend storing the aqueous solution for more than one day.

Description

Asunaprevir is an inhibitor of the hepatitis C non-structural 3/4A serine protease, which is required for viral replication.\(^1\) It is a direct-acting inhibitor of hepatitis C virus (HCV).\(^1,2\) It is commonly used in combination with daclatasvir and beclabuvir, which are also direct-acting HCV inhibitors.\(^1\)

References