

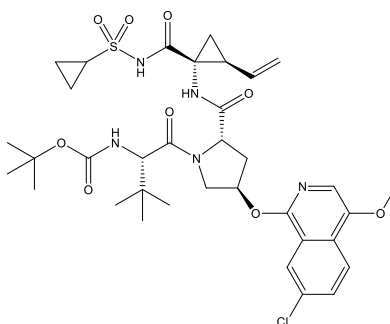
Catalog #10-4928

Asunaprevir

CAS# 630420-16-5

tert-Butyl N-[(2S)-1-[(2S,4R)-4-(7-chloro-4-methoxyisoquinolin-1-yl)oxy-2-[[[(1R,2S)-1-(cyclopropylsulfonyl)carbamoyl]-2-ethenylcyclopropyl]carbamoyl]pyrrolidine-1-yl]-3,3-dimethyl-1-oxobutan-2-yl]carbamate; BMS-650032

Lot # FBA94034



Asunaprevir is a potent hepatitis C virus NS3 protease inhibitor ($IC_{50} = 0.2 - 3.5$ nM).¹ Asunaprevir was used as part of a repressible Cas9 system (small molecule-assisted shut off – SMASh) capable of degrading newly synthesized Cas9 protein rapidly to precisely control gene editing.^{2,3} The Asunaprevir/SMASh system has also been using to target endogenous PD-1 protein for proteasomal degradation.⁴

- 1) McPhee *et al.* (2012), *Preclinical Profile and Characterization of the Hepatitis C Virus NS3 Protease Inhibitor Asunaprevir*, *Antimicrob. Agents Chemother.* **56** 5387
- 2) Chung *et al.* (2015), *Tunable and reversible drug control of protein production via a self-excising degron*; *Nat. Chem. Biol.* **11** 713
- 3) Wu *et al.* (2020), *A Small Molecule-Controlled Cas9 Repressible System*; *Mol. Ther. Nucleic Acids* **19** 922
- 4) Naruse *et al.* (2022), *A degron system targeting endogenous PD-1 inhibits the growth of tumor cells in mice*; *NAR Cancer* **4** zcac019

PHYSICAL DATA

Molecular Weight:	748.29
Molecular Formula:	C ₃₅ H ₄₆ ClN ₅ O ₉ S
Purity:	>98% (HPLC)
	NMR: (Conforms)
Solubility:	DMSO (at least 50 mg/mL)
Physical Description:	White solid
Storage and Stability:	Store as supplied at -20°C for up to 2 years from the date of purchase. Solutions in DMSO may be stored at -20°C for up to 3 months.

Materials provided by Focus Biomolecules are for laboratory research use only and are not intended for human or veterinary applications.

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