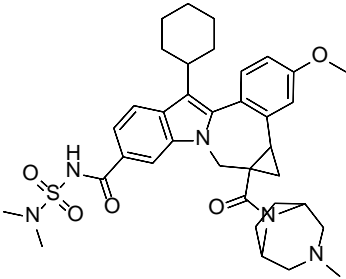


Product data sheet



MedKoo Cat#: 574302 Name: Beclabuvir CAS#: 958002-33-0 (free base) Chemical Formula: C ₃₆ H ₄₅ N ₅ O ₅ S Exact Mass: 659.3141 Molecular Weight: 659.85	
Product supplied as:	Powder
Purity (by HPLC):	≥ 98%
Shipping conditions	Ambient temperature
Storage conditions:	Powder: -20°C 3 years; 4°C 2 years. In solvent: -80°C 3 months; -20°C 2 weeks.

1. Product description:

Beclabuvir is an antiviral drug for the treatment of hepatitis C virus (HCV) infection.

2. CoA, QC data, SDS, and handling instruction

SDS and handling instruction, CoA with copies of QC data (NMR, HPLC and MS analytical spectra) can be downloaded from the product web page under “QC And Documents” section. Note: copies of analytical spectra may not be available if the product is being supplied by MedKoo partners. Whether the product was made by MedKoo or provided by its partners, the quality is 100% guaranteed.

3. Solubility data

Solvent	Max Conc. mg/mL	Max Conc. mM
DMSO	30.0	45.46

4. Stock solution preparation table:

Concentration / Solvent Volume / Mass	1 mg	5 mg	10 mg
1 mM	1.52 mL	7.58 mL	15.15 mL
5 mM	0.30 mL	1.52 mL	3.03 mL
10 mM	0.15 mL	0.76 mL	1.52 mL
50 mM	0.03 mL	0.15 mL	0.30 mL

5. Molarity Calculator, Reconstitution Calculator, Dilution Calculator

Please refer the product web page under section of “Calculator”

6. Recommended literature which reported protocols for in vitro and in vivo study

In vitro study

TBD

In vivo study

1. Teraoka Y, Uchida T, Imamura M, Hiraga N, Osawa M, Kan H, Saito Y, Tsuge M, Abe-Chayama H, Hayes CN, Makokha GN, Aikata H, Miki D, Ochi H, Ishida Y, Tateno C, Chayama K. Limitations of daclatasvir/asunaprevir plus beclabuvir treatment in cases of NS5A inhibitor treatment failure. *J Gen Virol*. 2018 Aug;99(8):1058-1065. doi: 10.1099/jgv.0.001091. Epub 2018 Jun 19. PMID: 29916799.

7. Bioactivity

Biological target: Beclabuvir is an inhibitor that binds to thumb site 1 of the hepatitis C virus (HCV) NS5B RNA-dependent RNA polymerase and inhibits recombinant NS5B proteins from HCV genotypes 1, 3, 4, and 5 with IC₅₀ of < 28 nM.

In vitro activity

TBD

In vivo activity

The efficacy of daclatasvir (DCV)/asunaprevir (ASV)/beclabuvir (BCV) treatment was evaluated in HCV-infected mice. Human hepatocyte chimaeric mice were injected with serum samples obtained from either a DAA-naïve patient or a DCV/ASV treatment

Product data sheet



failure and were then treated with DCV/ASV alone or in combination with BCV for 4 weeks. DCV/ASV treatment successfully eliminated the virus in DAA-naïve-patient HCV-infected mice. DCV/ASV treatment failure HCV-infected mice developed viral breakthrough during DCV/ASV treatment, with the emergence of NS5A-L31V/Y93H HCV resistance-associated variants (RAVs) being observed by direct sequencing. DCV/ASV/BCV treatment inhibited viral breakthrough in NS5A-L31V/Y93H-mutated HCV-infected mice, but HCV relapsed with the emergence of NS5B-P495S variants after the cessation of the treatment.

Reference: J Gen Virol. 2018 Aug;99(8):1058-1065.

<https://www.microbiologyresearch.org/content/journal/jgv/10.1099/jgv.0.001091#tab2>

Note: The information listed here was extracted from literature. MedKoo has not independently retested and confirmed the accuracy of these methods. Customer should use it just for a reference only.