Product Data Sheet

Product Name: Pibrentasvir
Cat. No.: GC19454

Chemical Properties

Cas. No.	1353900-92-1		
SMILES	FC(C=C(N=C([C@H](CCC1)N1C([C@H]([C@@H](C)OC)NC(OC)=O)=O)N2)C2=C3)=C3[C@@H]4N(C5=CC(F)=C(N6CCC(C7=CC=C(F)C=C7)CC6)C(F)=C5)[C@@H](C(C=C(NC([C@H](CCC8)N8C([C@H]([C@@H](C)OC)NC(OC)=O)=O)=N9)C9=C%10)=C%10F)CC4		
Formula	$C_{57}H_{65}F_5N_{10}O_8$	M.Wt	1113.18
Solubility	DMF: 25 mg/ml,DMSO: 20 mg/ml,Ethanol: 10 mg/ml	Storage	Store at -20°C
General tips	For obtaining a higher solubility , please warm the tube at 37 ℃ and shake it in the ultrasonic bath for a while.Stock solution can be stored below -20℃ for several months.		
Shipping Condition	Evaluation sample solution : ship with blue ice All other available size: ship with RT , or blue ice upon request.		
Structure	Pibrentasvir		

Protocol

Cell experiment:

The inhibitory effect of Pibrentasvir on HCV replication in replicon cells is determined in Dulbecco's modified Eagle's medium (DMEM) containing 5% fetal bovine serum with or without 40% human plasma. The cells are incubated with Pibrentasvir for 3 days and are subsequently lysed and processed according to the manufacturer's instructions to measure luciferase reporter activity using a Victor II luminometer. The 50% effective concentration (EC50) value is calculated using nonlinear regression curve fitting to the four-parameter logistic equation in software[1].

References:

[1]. Ng TI, et al. In Vitro Antiviral Activity and Resistance Profile of the Next-Generation Hepatitis C Virus NS5A Inhibitor Pibrentasvir. Antimicrob Agents Chemother. 2017 Apr 24;61(5). pii: e02558-16.

Background

Pibrentasvir is a novel and pan-genotypic hepatitis C virus (HCV) NS5A inhibitor with EC50s ranging from 1.4 to 5.0 pM against HCV replicons containing NS5A from genotypes 1 to 6.

Tel: (909) 407-4943 Fax: (626) 353-8530 E-mail: tech@glpbio.com
Address: 10292 Central Ave. #205, Montclair, CA, USA

Product Data Sheet

Pibrentasvir inhibits HCV genotype 1a-H77, 1b-Con1, and 2a-JFH-1 subgenomic replicons with 50% effective concentrations (EC50s) of 1.8, 4.3, and 5.0 pM, respectively. The antiviral activity of Pibrentasvir is attenuated 35- to 47-fold in the presence of 40% human plasma through sequestration of compound due to plasma protein binding. Pibrentasvir retains full activity against all of the genotype 1a and 1b single-position NS5A substitutions tested, except Y93H and Y93N in genotype 1a, which confers a ≤7-fold increase in EC50 to Pibrentasvir[1].

[1]. Ng TI, et al. In Vitro Antiviral Activity and Resistance Profile of the Next-Generation Hepatitis C Virus NS5A Inhibitor Pibrentasvir. Antimicrob Agents Chemother. 2017 Apr 24;61(5). pii: e02558-16.

Tel: (909) 407-4943 Fax: (626) 353-8530 E-mail: tech@glpbio.com
Address: 10292 Central Ave. #205, Montclair, CA, USA