Pibrentasvir (ABT-530)

Catalog No.C14381 Batch:C1438103

Product Datasheet

Technical Data

Formula	$C_{57}H_{65}F_5N_{10}O_8$					
Molecular Weight	1113.18	**CAS No.**	1353900-92-1			
Solubility (25°C)*	In vitro	DMSO	100 mg/mL (89.83 mM)			
		Ethanol	100 mg/mL (89.83 mM)			
		Water	Insoluble			
	In vivo (Add solvents to the product individually and in order)	Oral Administration	Homogeneous suspension	CMC-NA	≥5mg/ml	Taking the 1 mL working solution as an example, add 5 mg of this product to 1 ml of CMC-Na solution, mix evenly to obtain a homogeneous suspension with a final concentration of 5 mg/ml.
		Injection	Clear solution	5%DMSO [1] → 40%PEG300 [2] → 5%Tween80 [3] → 50%ddH2O Validated by Capsid Bio labs. Should you need adjustments to this formulation, contact our sales team for custom testing.	5.000mg/ml (4.49mM)	Taking the 1 mL working solution as an example, add 50 μL of 100 mg/ml clarified DMSO stock solution to 400 μL of PEG300, mix evenly to clarify it; add 50 μL of Tween80 to the above system, mix evenly to clarify; then continue to add 500 μL of ddH2O to adjust the volume to 1 mL. The mixed solution should be used immediately for optimal results.
			Clear solution	5% DMSO [1] → 95% Corn oil Validated by Capsid Bio labs. Should you need adjustments to this formulation, contact our sales team for custom testing.	0.830mg/ml (0.75mM)	Taking the 1 mL working solution as an example, add 50 μL of 16.6 mg/ml clear DMSO stock solution to 950 μL of corn oil and mix evenly. The mixed solution should be used immediately for optimal results.

* <1 mg/ml means slightly soluble or insoluble.
* Please note that Capsid Bio tests the solubility of all compounds in-house, and the actual solubility may differ slightly from published values. This is normal and is due to slight batch-to-batch variations.
* Room temperature shipping (Stability testing shows this product can be shipped at 2-8°C for storage purposes.)

Preparing Stock Solutions

Concentration \ Volume / Mass	1 mg	5 mg	10 mg
1 mM	0.8983 mL	4.4916 mL	8.9833 mL
5 mM	0.1797 mL	0.8983 mL	1.7967 mL
10 mM	0.0898 mL	0.4492 mL	0.8983 mL
50 mM	0.0180 mL	0.0898 mL	0.1797 mL

Biological Activity

Description	Pibrentasvir (ABT-530) is a novel and pan-genotypic **hepatitis C virus (HCV) NS5A** inhibitor, with this compound exhibiting EC50 values ranging from 1.4 pM to 5.0 pM against HCV replicons containing NS5A from genotypes 1 to 6.
Targets	GT5a [1] (Cell-free assay): 1.4 pM(EC50) GT1a H77 [1] (Cell-free assay): 1.8 pM(EC50) GT2b [1] (Cell-free assay): 1.9 pM(EC50) GT4a [1] (Cell-free assay): 1.9 pM(EC50) GT3a [1] (Cell-free assay): 2.1 pM(EC50) View More →
In vitro	Pibrentasvir (ABT-530) is a next-generation HCV NS5A inhibitor with potent and pan-genotypic activity, and it maintains activity against common amino acid substitutions of HCV genotypes 1 to 6 that are known to confer resistance to currently approved NS5A inhibitors.[1]

Protocol (from reference)

Cell Assay:[1]

- **Cell lines**
  Huh-7 human hepatoma cell line, CEM-SS cells
- **Concentrations**
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- **Incubation Time**
  6 days
- **Method**
  Antiviral activity assays for HIV-1 and HBV are performed at Southern Research Institute. Pibrentasvir (ABT-530) is tested in an HIV-1 antiviral cytoprotection assay using CEM-SS cells and the IIIB strain of HIV-1. Briefly, virus and cells are mixed in the presence of this compound or zidovudine (AZT; positive control) and incubated for 6 days. The titers of the virus are determined beforehand such that the virus-infected control wells exhibited approximately 85% to 95% loss of cell viability due to virus replication. Therefore, antiviral effect or cytoprotection is observed when it prevented virus replication. Six days after infection, 20 to 25 μl of MTS reagent is added per well, and the microtiter plates are then incubated for 4 to 6 h to assess cell viability. Plates are read spectrophotometrically at 490/650 nm with a Molecular Devices Vmax or SpectraMax Plus plate reader.

References

https://pubmed.ncbi.nlm.nih.gov/28193664/

RETURN POLICY

Capsid Bio's Unconditional Return Policy ensures a smooth online shopping experience for our customers. If you are in any way unsatisfied with your purchase, you may return any item(s) within 7 days of receiving it. In the event of product quality issues, either protocol related or product related problems, you may return any item(s) within 365 days from the original purchase date. Please follow the instructions below when returning products.

SHIPPING & STORAGE

Capsid Bio products are transported at room temperature. If you receive the product at room temperature, please rest assured, the Capsid Bio Quality Inspection Department has conducted experiments to verify that the normal temperature placement of one month will not affect the biological activity of powder products. After collecting, please store the product according to the requirements described in the datasheet. Most Capsid Bio products are stable under the recommended conditions.

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