Mezigdomide (CC-92480)

Catalog No.C13831 Batch:C1383103

Product Datasheet

Technical Data

Formula	$C_{32}H_{30}FN_5O_4$					
Molecular Weight	567.61	**CAS No.**	2259648-80-9			
Solubility (25°C)*	In vitro	DMSO	100 mg/mL (176.17 mM)			
		Water	Insoluble			
		Ethanol	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.	2.500mg/ml (4.40mM)	Taking the 1 mL working solution as an example, add 50 μL of 50 mg/ml clarified DMSO stock solution to 400 μL PEG300, mix evenly to clarify it; add 50 μL Tween80 to the above system, mix evenly to clarify it; then continue to add 500 μL 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.	2.500mg/ml (4.40mM)	Taking the 1 mL working solution as an example, add 50 μL of 50 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

Biological Activity

Description	Mezigdomide (CC-92480) is a novel protein degrader and a **cereblon E3 ligase** modulator (CELMoD) that has anti-myeloma activity.
Targets	Cereblon [1]
In vitro	Mezigdomide (CC-92480) has a unique and rapid degradation profile: it enhances the efficiency to drive the formation of the protein−protein interaction between Aiolos and cereblon, inducing targeted docking to the CRL4-CRBN E3 ubiquitin ligase complex. The CC-92480-dependent binding of Aiolos/Ikaros to CRBN leads to polyubiquitination and ultimately proteasome-mediated degradation of protein. Rapid and extensive loss of Aiolos/Ikaros in sensitive cells, such as multiple myeloma cells, results in apoptosis and subsequent cell death.[1]
In vivo	Mezigdomide (CC-92480) is evaluated in efficacy models to assess tumor growth inhibition in tumor bearing mice. When tumors reaches approximately 150 mm^3, mice are randomized and treated once daily (q.d.) orally with vehicle control or various dosage strengths of this compound. Both the 3 and 10 mg/kg doses give near maximal response in this model, while the lowest dose tested (1 mg/kg) shows 75% reduction in tumor volume by the end of the study.[1]

Protocol (from reference)

Cell Assay:[1]

- **Cell lines**
  H929 R10-1 cells
- **Concentrations**
  1 nM, 10 nM, 100 nM
- **Incubation Time**
  4 h, 72 h
- **Method**
  H929 R10-1 cells are treated with DMSO and Mezigdomide (CC-92480) for 4 h and 72 h. After treatment, cells are washed with 1× PBS and lysed in Chris buffer.

Animal Study:[1]

- **Animal Models**
  Female 6−8 weeks old CB17 SCID mice; Sprague-Dawley rats
- **Dosages**
  1 mg/kg, 3 mg/kg, 10 mg/kg; 2 mg/kg
- **Administration**
  Oral gavage; IV

References

https://pubmed.ncbi.nlm.nih.gov/32130004/

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.

NOT FOR HUMAN, VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

EU Headquarters
Gajeva ulica 28, HR-10000 Zagreb, Croatia

US Headquarters
12222 Merit Dr STE 130 Dallas, Texas, 75251

UK Headquarters
121 ABILITY HOUSE, BROOKER ROAD, EN9 1JH, ESSEX

Orders: Sales@capsidbio.com
Enquiries: info@capsidbio.com
www.capsidbio.com