ACBI1

Catalog No.C14362 Batch:C1436203

Product Datasheet

Technical Data

Formula	$C_{49}H_{58}FN_9O_7S$					
Molecular Weight	936.10	**CAS No.**	2375564-55-7			
Solubility (25°C)*	In vitro	DMSO	100 mg/mL (106.82 mM)			
		Ethanol	2 mg/mL (2.13 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]→ Corn oil Validated by Capsid Bio labs. Should you need adjustments to this formulation, contact our sales team for custom testing.	2.250mg/ml (2.40mM)	Taking the 1 mL working solution as an example, add 50 μL of 45 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	1.0683 mL	5.3413 mL	10.6826 mL
5 mM	0.2137 mL	1.0683 mL	2.1365 mL
10 mM	0.1068 mL	0.5341 mL	1.0683 mL
50 mM	0.0214 mL	0.1068 mL	0.2137 mL

Biological Activity

Description	ACBI1 is a potent and cooperative **PROTAC degrader** of **SMARCA2**, **SMARCA4** and **PBRM1** with DC50 of 6 nM, 11 nM and 32 nM for SMARCA2, SMARCA4 and PBRM1 in MV-4-11 cells, respectively. ACBI1 is composed of a bromodomain ligand, a linker, and the E3 ubiquitin ligase VHL. ACBI1 induces anti-proliferative effects and apoptosis.
Targets	SMARCA2 [1] (in MV-4-11 cells): 6 nM(DC50) SMARCA4 [1] (in MV-4-11 cells): 11 nM(DC50) PBRM1 [1] (in MV-4-11 cells): 32 nM(DC50)
In vitro	ACBI1 is a potent PROTAC degrader of BAF ATPase subunits SMARCA2 and SMARCA4, also degrades the polybromo-associated BAF (PBAF) complex member PBRM1, with DC50s of 6 nM, 11 nM and 32 nM for SMARCA2, SMARCA4 and PBRM1 in MV-4-11 cells, respectively. This compound can induce anti-proliferative effects and apoptosis.^{[1]}

Protocol (from reference)

Cell Assay:
^{[1]}

- **Cell lines**
  MV-4-11 cells
- **Concentrations**
  0.1-1000 nM
- **Incubation Time**
  18 h
- **Method**
  ACBI1 is diluted from a 10 mM DMSO stock solution to 20 μM in buffer consisting of 20 mM 1,3-bis[tris(hydroxymethyl)methylamino] propane (BIS-TRIS) propane, 150 mM NaCl, 1 mM TCEP, pH 7.4 and a final DMSO concentration of 0.2%. Two sets of sequential titrations aer performed; first, a titration of SMARCA2BD (200 μM, in the syringe) into this compound solution (20 μM, in the cell), followed by a titration of VCB complex solution (168 μM in the syringe) into the PROTAC–SMARCA2BD complex solution retained in the cell. Binary experiments consisted of an analogous initial single injection of buffer (syringe) into this chemical solution (20 μM, in the cell), followed by a titration of VCB complex solution (168 μM in the syringe) into the diluted PROTAC solution retained in the cells.

References

https://pubmed.ncbi.nlm.nih.gov/31178587/

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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