Product Datasheet

Technical Data

Formula	$C_{29}H_{31}F_3N_6O_3$					
Molecular Weight	568.59	**CAS No.**	1421227-53-3			
Solubility (25°C)*	In vitro	DMSO	100 mg/mL (175.87 mM)			
		Ethanol	100 mg/mL (175.87 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.

* <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	1.7587 mL	8.7937 mL	17.5874 mL
5 mM	0.3517 mL	1.7587 mL	3.5175 mL
10 mM	0.1759 mL	0.8794 mL	1.7587 mL
50 mM	0.0352 mL	0.1759 mL	0.3517 mL

Biological Activity

Description	WS6 is a β cell proliferation inducer via modulation of **Erb3 binding protein-1 (EBP1)** and the **IκB kinase** pathway.
Targets	EBP1 [1] | IκB kinase [1]
In vitro	WS6 induces R7T1 cell proliferation with EC50 of 0.28 μM, and promotes β cell proliferation in rodent and human primary islets. Both Erb3 binding protein-1 and the IκB kinase pathway are confirmed to function in the mechanism of action of this compound. [1]
In vivo	In RIP-DTA mouse model of β cell ablation, WS6 (50 mg/kg p.o.) ameliorates diabetes, and induces concomitant increases in β cell proliferation and β cell number. [1]

Protocol (from reference)

Cell Assay:[1]

- **Cell lines**
  R7T1 cells
- **Concentrations**
  ~10 μM
- **Incubation Time**
  4 days
- **Method**
  R7T1 cells are growth-arrested by removal of doxycycline for 2 days and plated into 384-well plates at a density of 3,000 cells/well in growth medium. B cell proliferation is assessed using CellTiter Glo after 4 days. Fold increase in cell number is calculated by normalizing compound-treated wells to the median of DMSO-treated wells.

References

https://pubmed.ncbi.nlm.nih.gov/23330637/

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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