Product Datasheet

Technical Data

Formula	$C_{39}H_{62}O_{13}$					
Molecular Weight	738.90	**CAS No.**	55916-51-3			
Solubility (25°C)*	In vitro	DMSO	100 mg/mL (135.33 mM)			
		Ethanol	100 mg/mL (135.33 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	1.3534 mL	6.7668 mL	13.5336 mL
5 mM	0.2707 mL	1.3534 mL	2.7067 mL
10 mM	0.1353 mL	0.6767 mL	1.3534 mL
50 mM	0.0271 mL	0.1353 mL	0.2707 mL

Biological Activity

Description	Polyphyllin VI derived from Paris polyphylla possess anti-cancer activities.
In vitro	Polyphyllin VI (PPVI) induces activation of the NLRP3 inflammasome and exerts anti-proliferative effect via the induction of the ROS/NF-κB/NLRP3/GSDMD signal axis in non-small cell lung cancer (NSCLC).^{[1]}
In vivo	Polyphyllin VI (PPVI), a main saponin isolated from TTM, activates the NLRP3 inflammasome in A549-bearing athymic nude mice.^{[1]}

Protocol (from reference)

Cell Assay:
^{[1]}

- **Cell lines**
  A549, H1299 cells
- **Concentrations**
  3-6 μM
- **Incubation Time**
  24 h, 48 h, 72 h
- **Method**
  A549 or H1299 cells seeded onto 96-well cell plates at a density of 5×103 cells/well are treated with PPVI under the indicated concentrations for 24, 48, and 72 h. After treatment, 10 μL of MTT solution (5 mg/mL) is added to each well and continued to incubate for another 4 h. The medium is then removed and 150 L of DMSO is added to each well to dissolve the formed formazan in the cells. After shaking at low speed for 10 min at room temperature, the colorimetric reading of the solute mixture is then determined by spectrophotometer at OD 570 nm.

Animal Study:
^{[1]}

- **Animal Models**
  A549-Bearing Athymic Nude Mice
- **Dosages**
  2.5, 5, and 10 mg/kg
- **Administration**
  i.p.

References

https://www.ncbi.nlm.nih.gov/pmc/articles/PMC7017302/

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