Product Datasheet

Technical Data

Formula	$C_{17}H_{20}O_5$					
Molecular Weight	304.34	**CAS No.**	108853-14-1			
Solubility (25°C)*	In vitro	DMSO	61 mg/mL (200.43 mM)			
	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	3.2858 mL	16.4290 mL	32.8580 mL
5 mM	0.6572 mL	3.2858 mL	6.5716 mL
10 mM	0.3286 mL	1.6429 mL	3.2858 mL
50 mM	0.0657 mL	0.3286 mL	0.6572 mL

Biological Activity

Description	Dendrophenol (Moscatilin) is from *Dendrobium nobile*, a naturally occurring bibenzyl compound with potential antimutagenic activity. This compound almost completely suppresses (97%) the AFB1-induced SOS response with an IC50 of 0.08 μM.
In vitro	Dendrophenol induces apoptosis of colorectal HCT-116 cells via tubulin depolymerization and DNA damage stress and that this leads to the activation of JNK and mitochondria-involved intrinsic apoptosis pathway.[2]
In vivo	In Male severe combined immunodeficient mice implanted with HCT-116 cells, the i.p. treatment with dendrophenol causes a significant inhibition of tumor growth without the loss of body weight.[2]

Protocol (from reference)

Cell Assay:[2]

- **Cell lines**
  HCT-116 cells
- **Concentrations**
  3, 10, 30 μM
- **Incubation Time**
  30 min
- **Method**
  The CytoDYNAMIX ScreenTM3 (CDS-03) kits are used for the detection of polymerization of tubulin/microtubule. Tubulin proteins (>99% purity) are suspended (300 μg/sample) with 100 μL G-PEM buffer plus 5% glycerol in the absence or presence of this compound at 4 ℃. Then, the sample mixture is transferred to the 96-well plate, and the polymerization of tubulin is measured at 340 nm every 0.5 min for 45 min at 37 ℃.

References

https://pubmed.ncbi.nlm.nih.gov/10552513/ https://pubmed.ncbi.nlm.nih.gov/18594007/

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.

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