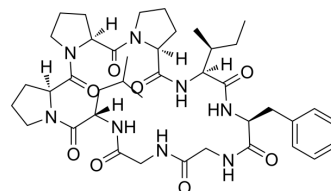


Heterophyllin B

Cat. No.:	HY-N1476
CAS No.:	145459-19-4
Molecular Formula:	C ₄₀ H ₅₈ N ₈ O ₈
Molecular Weight:	778.94
Target:	PI3K
Pathway:	PI3K/Akt/mTOR
Storage:	4°C, protect from light * In solvent : -80°C, 6 months; -20°C, 1 month (protect from light)



SOLVENT & SOLUBILITY

In Vitro	DMSO : 100 mg/mL (128.38 mM; Need ultrasonic)			
	Preparing Stock Solutions	Solvent Concentration	Mass	1 mg
				5 mg
				10 mg
				10 mM
1 mM	1.2838 mL	6.4190 mL	12.8380 mL	
5 mM	0.2568 mL	1.2838 mL	2.5676 mL	
10 mM	0.1284 mL	0.6419 mL	1.2838 mL	
Please refer to the solubility information to select the appropriate solvent.				
In Vivo	1. Add each solvent one by one: 10% DMSO >> 40% PEG300 >> 5% Tween-80 >> 45% saline Solubility: ≥ 2.5 mg/mL (3.21 mM); Clear solution			
	2. Add each solvent one by one: 10% DMSO >> 90% (20% SBE-β-CD in saline) Solubility: ≥ 2.5 mg/mL (3.21 mM); Clear solution			
	3. Add each solvent one by one: 10% DMSO >> 90% corn oil Solubility: ≥ 2.5 mg/mL (3.21 mM); Clear solution			

BIOLOGICAL ACTIVITY

Description	Heterophyllin B is an active cyclic peptide isolated from <i>Pseudostellaria heterophylla</i> . Heterophyllin B provides a novel strategy for the treatment of esophageal cancer ^[1] .
In Vitro	Heterophyllin B (0-200 μM; 12-48 hours) reduces cell viability in the 75, 100 and 200 μM groups, has no effect on 5, 10, 25 and 50 μM groups ^[1] . Heterophyllin B (0-50 μM; 6 hours) suppresses the expression levels of p-PI3K, p-AKT and β-catenin in a dose-dependent manner in ECA-109 cells ^[1] . MCE has not independently confirmed the accuracy of these methods. They are for reference only. Cell Viability Assay ^[1]

Cell Line:	ECA-109 cells
Concentration:	5 μ M, 10 μ M, 25 μ M, 50 μ M, 75 μ M, 100 μ M and 200 μ M
Incubation Time:	12, 24 and 48 hours
Result:	Decreased cell viability at high concentrations.

Western Blot Analysis^[1]

Cell Line:	ECA-109 cells
Concentration:	0 μ M, 10 μ M, 25 μ M, 50 μ M
Incubation Time:	6 hours
Result:	Decreased the phosphorylation of PI3K/AKT and the expression of β -catenin.

CUSTOMER VALIDATION

- Hum Cell. 2022 Dec 21.
- Tissue Cell. 2023 Jun 9, 102129.

See more customer validations on www.MedChemExpress.com

REFERENCES

[1]. Tantai JC, et al. Heterophyllin B inhibits the adhesion and invasion of ECA-109 human esophageal carcinoma cells by targeting PI3K/AKT/ β -catenin signaling. Mol Med Rep. 2016 Feb;13(2):1097-104.

Caution: Product has not been fully validated for medical applications. For research use only.

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