Heclin

Cat. No.: HY-110204

CAS No.: 890605-54-6

Molecular Formula: $C_{17}H_{17}NO_3$

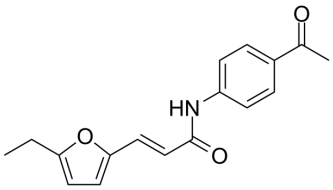
Molecular Weight: 283.32

Target: E1/E2/E3 Enzyme; Akt; MyD88

Pathway: Metabolic Enzyme/Protease; PI3K/Akt/mTOR; Immunology/Inflammation

Storage:

Powder	-20°C	3 years
	4°C	2 years
In solvent	-80°C	6 months
	-20°C	1 month



SOLVENT & SOLUBILITY

In Vitro

DMSO : 100 mg/mL (352.96 mM; Need ultrasonic)

Preparing Stock Solutions	Solvent / Mass / Concentration	1 mg	5 mg	10 mg
	1 mM	3.5296 mL	17.6479 mL	35.2958 mL
	5 mM	0.7059 mL	3.5296 mL	7.0592 mL
	10 mM	0.3530 mL	1.7648 mL	3.5296 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 (8.82 mM); Clear solution
2. Add each solvent one by one: 10% DMSO >> 90% corn oil
   Solubility: ≥ 2.5 mg/mL (8.82 mM); Clear solution

BIOLOGICAL ACTIVITY

Description

Heclin is a HECT E3 ubiquitin ligases inhibitor. Heclin inhibits Smurf2, Nedd4, WWP1 (IC_{50} values are 6.8, 6.3, 6.9 μM) and can be used for the research of gastric cancer[1][2][3].

In Vitro

Heclin (10 μM, 1-5 days) inhibits cell viability and IGF1 signaling of BGC803 and MKN45 cell lines[1].
Heclin (7 μM, 1 h) ameliorates epinecidin-1-mediated MyD88 degradation in Raw264.7 cells[2].
MCE has not independently confirmed the accuracy of these methods. They are for reference only.

Western Blot Analysis[1]

Cell Line:	BGC803 and MKN45 cells

Concentration:	10 μM
Incubation Time:	48 h
Result:	Reduced phosphorylation of Akt.

CUSTOMER VALIDATION

- Mol Cell. 2023 Nov 16:S1097-2765(23)00913-9.

See more customer validations on www.MedChemExpress.com

REFERENCES

[1]. Wang K, et al. Targeting the E3 ligase NEDD4 as a novel therapeutic strategy for IGF1 signal pathway-driven gastric cancer [J]. Oncogene, 2023, 42(14): 1072-1087.

[2]. Su B C, Chen J Y. Antimicrobial peptide epinecidin-1 modulates MyD88 protein levels via the proteasome degradation pathway [J]. Marine Drugs, 2017, 15(11): 362.

[3]. Mund T, et al. Peptide and small molecule inhibitors of HECT-type ubiquitin ligases [J]. Proceedings of the National Academy of Sciences, 2014, 111(47): 16736-16741.

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