PNC-28

Cat. No.:	HY-P3509
CAS No.:	392661-17-5
Molecular Formula:	$C_{164}H_{255}N_{47}O_{37}S$
Molecular Weight:	3509.13
Sequence Shortening:	ETFSDLWKLLKKWKMRRNQFWVKVQRG
Target:	Others
Pathway:	Others
Storage:	Please store the product under the recommended conditions in the Certificate of Analysis.

BIOLOGICAL ACTIVITY

Description

PNC-28 is a peptide from the mdm-2-binding domain (residues 17–26) of the p53 protein which contains a membrane crossing-penetratin sequence. PNC-28 can be used for pancreatic cancer research[1][2].

In Vitro

PNC-28 (0-0.5 mg/mL) blocks growth of a lethal human pancreatic cancer cell line[2].

MCE has not independently confirmed the accuracy of these methods. They are for reference only.

Cell Proliferation Assay[2]

Cell Line:	MiaPaCa-2 human pancreatic carcinoma cells
Concentration:	0.1, 0.3, and 0.5 mg/mL
Incubation Time:	daily
Result:	Showed dependent induction of tumor cell death starting at 0.1 mg/ml.

In Vivo

PNC-28 (2 mg/mouse, SC or IP, for 14 days) blocks the growth of BMRPA1. Tuc3 cells in vivo[1].

PNC-28 (1-20 mg/mouse, SC, for 14 days) inhibits BMRPA1. Tuc3 tumor growth especially if delivered directly to the tumor [1].

MCE has not independently confirmed the accuracy of these methods. They are for reference only.

Animal Model:	Athymic Nu/Nu mice (7–8 weeks, 22–24 g, injected i.p. with BMRPA1.Tuc3 cells)[1]
Dosage:	2 mg/mouse
Administration:	Implanted s.c. or i.p., with 14 days mini-osmotic pumps releasing PNC-28 at a rate of 0.25 μl/hr
Result:	No ascites was seen in the PNC-28-treated animals. strongly effective in inhibiting this particular tumor.

Animal Model:	Athymic Nu/Nu mice (7–8 weeks, 22–24 g, injected i.p. with BMRPA1.Tuc3 cells)[1]

Dosage:	1 mg/mouse, 10 mg/mouse and 20 mg/mouse
Administration:	When the tumors reached sizes from 40 to 260 mg/mouse, mini-osmotic pumps were implanted s.c. that released, over a period of 14 days
Result:	Resulted in a significant level of tumor growth inhibition in a dose-related manner.

REFERENCES

[1]. Michl J, et al. PNC-28, a p53-derived peptide that is cytotoxic to cancer cells, blocks pancreatic cancer cell growth in vivo. Int J Cancer. 2006 Oct 1;119(7):1577-85.

[2]. Kelley A. Sookraj. QS304. Novel p53-Derived Peptide Induces Rapid Human Pancreatic Cancer Cell Death. 2008, 144(2), 1.

Tel: 609-228-6898 Fax: 609-228-5909 E-mail: tech@MedChemExpress.com

Address: 1 Deer Park Dr, Suite Q, Monmouth Junction, NJ 08852, USA