

CHD4 Targeting Peptide Isolated From Viral Protein For Cancer Therapeutics

Tech ID: 33318 / UC Case 2022-557-0

ABSTRACT

Researchers at the University of California, Davis have identified a short peptide which rapidly promotes protein degradation in cancerous enzymes and induces cell differentiation to kill lymphomas.

FULL DESCRIPTION

Researchers at the University of California Davis have discovered a small peptide from viral protein sequence that has been shown to interact with CHD4, a regulating protein that is deregulated in cancerous cells. Specifically, the presence of the discovered peptide causes the CHD4 protein to degrade faster, ultimately killing the cancer cells. The peptide can bind to CHD4 well, facilitate differentiation of cancer cells, slow cancer cell growth, and trigger programmed cell death. Further, using a lymphoma mouse model, the researchers demonstrated inhibition of cancer cell growth without any measurable toxicity. The peptide has potential use for the regulation of the CHD4 protein and oncology treatments.

APPLICATIONS

- ▶ Induction of cell differentiation
- ▶ Oncology

FEATURES/BENEFITS

- ▶ Therapeutic purposes
- ▶ Regulation of proteins, specifically CHD4
- ▶ Weakening cancer cell growth in organisms

PATENT STATUS

Country	Type	Number	Dated	Case
Patent Cooperation Treaty	Reference for National Filings	WO 2023/215235	11/09/2023	2022-557

Patent Pending

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INVENTORS

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OTHER INFORMATION

KEYWORDS

peptides, cancer cell

growth, CHD4, cell

differentiation,

differentiation therapy,

protein regulation, gene

expression

CATEGORIZED AS

- ▶ **Medical**
 - ▶ Disease: Cancer
- ▶ **Research Tools**
 - ▶ Antibodies
 - ▶ Nucleic Acids/DNA/RNA
 - ▶ Protein Synthesis

RELATED CASES

2022-557-0

ADDITIONAL TECHNOLOGIES BY THESE INVENTORS

- ▶ [Transcription Active Complex Targeting Cancer Drug From Viral Protein Sequence](#)
- ▶ [Use Of Viral Il-6 To Modulate Monocyte Differentiation To Boost Anti-Tumor Immunity](#)
- ▶ [Cellular Protein CDH4 Inhibiting Peptide](#)

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