

Request Information

Permalink

# 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 | <a href="#">WO 2023/215235</a> | 11/09/2023 | 2022-557 |

Patent Pending

## 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](#)

## CONTACT

Prabakaran Soundararajan  
[psoundararajan@ucdavis.edu](mailto:psoundararajan@ucdavis.edu)  
tel: .



## INVENTORS

- ▶ Izumiya, Yoshihiro

## 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

