

# CRISPR-CAS EFFECTOR POLYPEPTIDES AND METHODS OF USE THEREOF

Tech ID: 32866 / UC Case 2022-147-0

## PATENT STATUS

Country	Type	Number	Dated	Case
Patent Cooperation Treaty	Published Application	<a href="#">WO 2023/250384</a>	12/28/2023	2022-147

## BRIEF DESCRIPTION

CRISPR-Cas systems comprise a CRISPR-associated (Cas) effector polypeptide and a guide nucleic acid. Such CRISPR-Cas systems can bind to and modify a targeted nucleic acid. The programmable nature of these CRISPR-Cas effector systems has facilitated their use as a versatile technology for use in, e.g., gene editing.

UC Berkeley researchers have discovered new CRISPR-Cas effector Cas12L/Cas Lambda/Cas $\lambda$  polypeptides and methods of modifying a target nucleic acid using a Cas12L/Cas Lambda polypeptide.

## SUGGESTED USES

» gene editing

## CONTACT

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## INVENTORS

» Doudna, Jennifer A.

## OTHER INFORMATION

### KEYWORDS

Lambda, Cas, gene editing, Cas12L

### CATEGORIZED AS

» **Medical**

» Gene Therapy

» Research Tools

» Therapeutics

» **Research Tools**

» Nucleic Acids/DNA/RNA

### RELATED CASES

2022-147-0

## ADDITIONAL TECHNOLOGIES BY THESE INVENTORS

- COMPOSITIONS AND METHODS FOR IDENTIFYING HOST CELL TARGET PROTEINS FOR TREATING RNA VIRUS INFECTIONS
- Genome Editing via LNP-Based Delivery of Efficient and Stable CRISPR-Cas Editors
- Type III CRISPR-Cas System for Robust RNA Knockdown and Imaging in Eukaryotes
- Cas12-mediated DNA Detection Reporter Molecules
- Improved guide RNA and Protein Design for CasX-based Gene Editing Platform
- Cas13a/C2c2 -A Dual Function Programmable RNA Endoribonuclease
- RNA-directed Cleavage and Modification of DNA using CasY (CRISPR-CasY)
- CasX Nickase Designs, Tans Cleavage Designs & Structure
- In Vivo Gene Editing Of Tau Locus Via Liponanoparticle Delivery
- A Dual-RNA Guided CasZ Gene Editing Technology
- CRISPR-CAS EFFECTOR POLYPEPTIDES AND METHODS OF USE THEREOF ("Cas-VariPhi")
- Modifications To Cas9 For Passive-Delivery Into Cells

- ▶ [A Protein Inhibitor Of Cas9](#)
- ▶ [RNA-directed Cleavage and Modification of DNA using CasX \(CRISPR-CasX\)](#)
- ▶ [Compositions and Methods for Genome Editing](#)
- ▶ [Split-Cas9 For Regulatable Genome Engineering](#)
- ▶ [Methods to Interfere with Prokaryotic and Phage Translation and Noncoding RNA](#)
- ▶ [CRISPR CASY COMPOSITIONS AND METHODS OF USE](#)
- ▶ [Single Conjugative Vector for Genome Editing by RNA-guided Transposition](#)
- ▶ [Improved Cas12a Proteins for Accurate and Efficient Genome Editing](#)
- ▶ [CRISPR-CAS EFFECTOR POLYPEPTIDES AND METHODS OF USE THEREOF](#)
- ▶ [Engineered/Variant Hyperactive CRISPR CasPhi Enzymes And Methods Of Use Thereof](#)
- ▶ [Engineering Cas12a Genome Editors with Minimized Trans-Activity](#)
- ▶ [Methods Of Use Of Cas12L/CasLambda In Plants](#)
- ▶ [Type V CRISPR/CAS Effector Proteins for Cleaving ssDNA and Detecting Target DNA](#)
- ▶ [THERMOSTABLE RNA-GUIDED ENDONUCLEASES AND METHODS OF USE THEREOF \(GeoCas9\)](#)
- ▶ [Structure-Guided Methods Of Cas9-Mediated Genome Engineering](#)
- ▶ [Endoribonucleases For Rna Detection And Analysis](#)
- ▶ [Efficient Site-Specific Integration Of New Genetic Information Into Human Cells](#)
- ▶ [Class 2 CRISPR/Cas COMPOSITIONS AND METHODS OF USE](#)
- ▶ [Compositions and Methods of Use for Variant Csy4 Endoribonucleases](#)
- ▶ [Identification Of Sites For Internal Insertions Into Cas9](#)
- ▶ [Methods and Compositions for Controlling Gene Expression by RNA Processing](#)



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