MODULATORS OF TYPE VI-D CRISPR-CAS EFFECTOR POLYPEPTIDES AND METHODS OF USE THEREOF

Tech ID: 32242 / UC Case 2021-087-0

PATENT STATUS

Patent Pending

BRIEF DESCRIPTION

UC researchers have discovered anti-CRISPR (Acr) polypeptides that inhibit activity of a CRISPR-Cas effector polypeptide, for example, Type VI-D CRISPR-Cas effector polypeptides, nucleic acids encoding the Acr polypeptides, and systems and kits comprising the polypeptides and/or nucleic acids encoding the Acr polypeptides. The inhibitor is a small protein from a phage and is capable of strongly inhibiting gene editing in human cells.

SUGGESTED USES

» gene editing

ADVANTAGES

» limits off-target editing, or other applications where reduced activity or rapid inhibition is desired

INVENTORS

» Doudna, Jennifer A.

OTHER INFORMATION

CATEGORIZED AS

» Materials & Chemicals
» Biological
» Medical
» Gene Therapy
» Research Tools
» Research Tools
» Nucleic Acids/DNA/RNA

RELATED CASES

2021-087-0

ADDITIONAL TECHNOLOGIES BY THESE INVENTORS

» Methods and Compositions for Using Argonaute to Modify a Single-Stranded Target Nucleic Acid
» COMPOSITIONS AND METHODS FOR IDENTIFYING HOST CELL TARGET PROTEINS FOR TREATING RNA VIRUS INFECTIONS
» Cas9 Variants With Altered DNA Cleaving Activity
» 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 Endonuclease
» Methods For High Signal-To-Noise Imaging Of Chromosomal Loci In Cells Using Fluorescent Cas9
» A Dual-RNA Guided Cas2 Gene Editing Technology
» CRISPR-CAS EFFECTOR POLYPEPTIDES AND METHODS OF USE THEREOF ("Cas-VariPhi")
» A Protein Inhibitor Of Cas9
» Small Cas9 Protein Inhibitor
» Split-Cas9 For Regulatable Genome Engineering
» Decorating Chromatin for Precise Genome Editing Using CRISPR
» Optimized Virus-like Particles for Cas9 RNPs & Transgene/HDR Template Delivery
» CRISPR-CAS EFFECTOR POLYPEPTIDES AND METHODS OF USE THEREOF ("Cas-Theta")
» COMPOSITIONS AND METHODS FOR INCREASING HOMOLOGY-DIRECTED REPAIR
» CRISPR CASY COMPOSITIONS AND METHODS OF USE
» Engineered/Variant Hyperactive CRISPR CasPhi Enzymes And Methods Of Use Thereof
» Type V CRISPR/CAS Effectors Proteins for Cleaving ssDNA and Detecting Target DNA