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

CATEGORIZED AS

» Materials & Chemicals
» Biological
» Medical
» Gene Therapy
» Research Tools

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-VarPhi")
» 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 CAS9 COMPOSITIONS AND METHODS OF USE
» Single Conjugative Vector for Genome Editing by RNA-guided Transposition
» CRISPR-CAS EFFECTOR POLYPEPTIDES AND METHODS OF USE THEREOF ("Cas-Omega")
» CRISPR-CAS EFFECTOR POLYPEPTIDES AND METHODS OF USE THEREOF
» Engineered/Variant Hyperactive CRISPR CasPn Enzymes And Methods Of Use Thereof
» Type V CRISPR/CAS Effectors 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
CRISPR-CAS EFFECTOR POLYPEPTIDES AND METHODS OF USE THEREOF (CasGamma)
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
Chimeric Cas9 Variants With Novel Engineered Enzymatic Activities
Small Molecule Assisted Cell Penetrating Cas9 RNP Delivery
Methods and Compositions for Controlling Gene Expression by RNA Processing