RNA WRITING: PROGRAMMABLE SPLICING FOR TRANSCRIPTOME ENGINEERING

Tech ID: 32784 / UC Case 2022-112-0

PATENT STATUS

Country	Type	Number	Dated	Case
Patent Cooperation Treaty	Reference for National Filings	WO 2023/220672	11/16/2023	2022-112

Patent Pending

BRIEF DESCRIPTION

RNA splicing is a fundamental biological process, in which a pre-mRNA transcript is modified by the endogenous spliceosomal complex into a mature mRNA transcript. This standard process involves a single pre-mRNA molecule “in cis.” Whereas methods for editing DNA using editing enzymes have been described and are currently in use for various gene editing applications, there is a need in the art for methods of editing RNA.

UC Berkeley researchers have created a hybrid RNA molecule comprising a targeting region and a donor RNA, and compositions comprising the hybrid RNA molecule which is useful in methods of modifying a target RNA by employing a splicing reaction that joins two distinct RNA molecules “in trans.”

SUGGESTED USES

- RNA editing

CONTACT

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INVENTORS

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OTHER INFORMATION

CATEGORIZED AS

- **Medical**
  - Research Tools
  - Therapeutics
- **Research Tools**
  - Nucleic Acids/DNA/RNA

RELATED CASES

2022-112-0

ADDITIONAL TECHNOLOGIES BY THESE INVENTORS

- Compositions and Methods of Isothermal Nucleic Acid Detection
- RECOMBINASES FOR INTEGRATING DNA & RECOMBINASE FUSIONS