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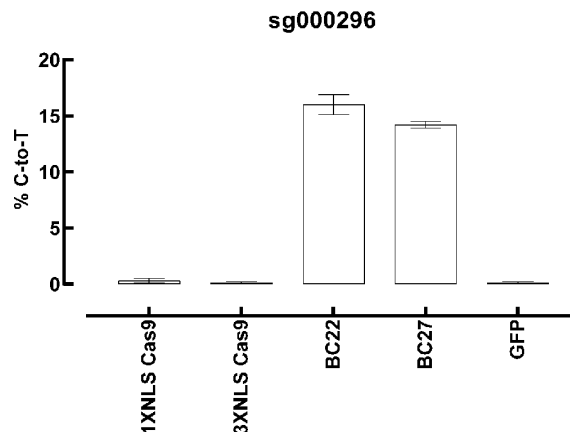


FIG. 1A

(57) Abstract: Polynucleotides, polypeptides, compositions, and methods for genome editing using deamination are provided. An mRNA containing an open reading frame (ORF) encoding a polypeptide is provided herein. The polypeptide includes a cytidine deaminase and an RNA-guided nickase, and does not include a uracil glycosylase inhibitor (UGI). A composition provided herein may include two different mRNAs. The first mRNA includes an ORF encoding a cytidine deaminase and an RNA-guided nickase, and the second mRNA includes an ORF encoding uracil glycosylase inhibitor (UGI).

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