region, and a second linker region which connects the Cas9 region and the NLS region. In some embodiments, the GC% content of the TadA region is greater than 60%. In some embodiments, the GC% content of the TadA region is greater than or equal to 70%. In some embodiments, the GC% content of the Cas9 region is greater than 56%. In some embodiments, the GC% content of the Cas9 region is greater than or equal to 62%. In some embodiments, the GC% content of the NLS region is greater than 54%. In some embodiments, the GC% content of the NLS region is greater than or equal to 63%. In some embodiments, the GC% content of the first linker region is greater than 65%. In some embodiments, the GC% content of the first linker region is greater than or equal to 79%. In some embodiments, the GC% content of the second linker region is greater than 67%. In some embodiments, the GC% content of the second linker region is greater than or equal to 83%. In some embodiments, the GC% content of the TadA region is greater than 60%, the GC% content of the Cas9 region is greater than 56%, the GC% content of the NLS region is greater than 54%, the GC% content of the first linker region is greater than 65%, and the GC% content of the second linker region is greater than 67%. In some embodiments, the mRNA comprises a mRNA sequence selected from Table 23. In some embodiments, the mRNA comprises a mRNA sequence of SEQ ID No: 2136. In some embodiments, the mRNA comprises a poly A tail. In some embodiments, the composition further comprises a lipid nanoparticle (LNP) enclosing (i). In some embodiments, the LNP further encloses (ii). In some embodiments, the composition further comprises a second LNP enclosing (ii). In some embodiments, the ratio of the guide RNA and the mRNA encoding the base editor fusion protein is about 1:10 to about 10:1 by weight. In some embodiments, the ratio of the guide RNA and the mRNA encoding the base editor fusion protein is about 1:1, 1.5:1, 2:1, 3:1, 4:1, 1:1.5, 1:2, 1:3, or 1:4 by weight. In some embodiments, the ratio of the guide RNA and the mRNA encoding the base editor fusion protein is about 1:1 by weight.

[14a] In another aspect, provided herein is a composition comprising: (i) an mRNA encoding a protein comprising a programmable DNA binding domain and a deaminase; and (ii) a guide polynucleotide, wherein the guide polynucleotide comprises a spacer sequence, wherein the spacer sequence comprises at least 13 nucleotide bases of a nucleotide base sequence of a protospacer, wherein the protospacer is on a gene that encodes proprotein convertase subtilisin-kexin type 9 (PCSK9 gene), and wherein uracil is considered the same as thymine.

[15] In another aspect, provided herein is a pharmaceutical composition comprising the composition as provided herein and a pharmaceutically acceptable carrier or excipient.

[15a] In another aspect, provided herein is a pharmaceutical composition, comprising the composition as described herein, for use in treatment or prevention of a condition in a subject in need thereof.

[16] In another aspect, provided herein is a method for treating or preventing a condition in a subject in need thereof, the method comprising administering to the subject a therapeutically effective amount of the composition as provided herein. In some embodiments, the administration is via intravenous infusion. In some embodiments, the method comprises sequential administration of a LNP enclosing (i) and a LNP enclosing (ii). In some embodiments, the method comprises concurrent administration of the t LNP enclosing (i) and the LNP enclosing (ii). In some embodiments, the method comprises