

[Abstract]

The present disclosure provides a miniaturized cytidine deaminase-containing complex for modifying DNA, the complex being capable of miniaturizing cytidine deaminase and suppressing off-target effects while suppressing a reduction in the modification efficiency of a target site. The complex is formed by combining a nucleic acid sequence recognition module and cytidine deaminase, wherein: the nucleic acid sequence recognition module specifically binds to a target nucleotide sequence of double-stranded DNA; the cytidine deaminase is composed of (1) an amino acid sequence composed of a region of amino acid residues at the 30th position to 150th position of an amino acid sequence represented by SEQ ID NO: 1, (2) an amino acid sequence, which is an ortholog of a protein composed of an amino acid sequence represented by SEQ ID No:1, the amino acid sequence being composed of a region corresponding to the region in (1), (3) an amino acid sequence having one or several amino acids in the amino acid sequence in (1) or (2) deleted, substituted, inserted, and/or added, or (4) an amino acid sequence having at least 90% similarity to or being identical to the amino acid sequence in (1) or (2); and the targeted site of the double-stranded DNA is modified.

[No suitable figure]