[CLAIMS]

[Claim 1]

A method for producing an endogenous DNA-edited eukaryotic cell, comprising:

introducing a CRISPR-Cas3 system into a eukaryotic cell, wherein

the CRISPR-Cas3 system includes the following (A) to (C)

(A) a Cas3 protein, a polynucleotide encoding the protein, or an expression vector containing the polynucleotide,

(B) a Cascade protein, a polynucleotide encoding the protein, or an expression vector containing the polynucleotide, and

(C) a pre-crRNA which targets the endogenous DNA, a polynucleotide encoding the pre-crRNA, or an expression vector containing the polynucleotide.

[Claim 2]

A method for producing an endogenous DNA-edited animal (excluding a human) or plant, comprising:

introducing a CRISPR-Cas3 system into an animal (excluding a human) or plant, wherein

the CRISPR-Cas3 system includes the following (A) to (C)

(A) a Cas3 protein, a polynucleotide encoding the protein, or an expression vector containing the

polynucleotide,

(B) a Cascade protein, a polynucleotide encoding the protein, or an expression vector containing the polynucleotide, and

(C) a pre-crRNA which targets the endogenous DNA, a polynucleotide encoding the pre-crRNA, or an expression vector containing the polynucleotide.

[Claim 3]

The method according to claim 1 or 2, further comprising

cleaving the pre-crRNA which targets the endogenous DNA with a protein constituting the Cascade protein after introducing the CRISPR-Cas3 system into the eukaryotic cell.

[Claim 4]

The method according to any one of claims 1 to 3, wherein

a nuclear localization signal is added to the Cas3 protein and/or the Cascade protein.

[Claim 5]

The method according to claim 4, wherein

the nuclear localization signal is a bipartite nuclear localization signal.

[Claim 6]

A kit for use in the method according to any one of claims 1 to 5, the kit comprising the following (A) to (C):

(A) a Cas3 protein, a polynucleotide encoding the

protein, or an expression vector containing the polynucleotide,

(B) a Cascade protein, a polynucleotide encoding the protein, or an expression vector containing the polynucleotide, and

(C) a pre-crRNA which targets the endogenous DNA, a polynucleotide encoding the pre-crRNA, or an expression vector containing the polynucleotide.

[Claim 7]

The kit according to claim 6, wherein

a nuclear localization signal is added to the Cas3 protein and/or the Cascade protein.

[Claim 8]

The kit according to claim 7, wherein

the nuclear localization signal is a bipartite nuclear localization signal.