

[Title of Invention] GENOME ENGINEERING METHOD AND GENOME ENGINEERING KIT

[Document Name] Abstract

Provided are a genome engineering method and a genome engineering kit which can efficiently engineer two or more alleles and are capable of engineering a relatively large region. The present invention provides a genome engineering method for engineering two or more alleles, comprising the steps of: (a) introducing the following (i) and (ii) to a cell comprising the chromosome: (i) a genome engineering system comprising a sequence-specific nucleic acid cleaving molecule targeting a target region in the chromosomal genome, or a polynucleotide encoding the sequence-specific nucleic acid cleaving molecule, and (ii) two or more donor DNAs for selective markers respectively having different selective marker genes (the number of types of the donor DNAs for selective markers are equal to or more than the number of the alleles that are subject to genome engineering); and (b) selecting the cell on the basis of all the selective marker genes carried by the two or more donor DNAs for selective markers.

[FIG. 1]