

Method for editing target RNA

Abstract

A method for converting an editing target C contained in a target RNA to U or an editing target U contained in a target RNA to C is provided. A method for editing a target RNA, which comprises applying an artificial DYW protein containing a DYW domain consisting of any one of the polypeptides a, b, c, and bc mentioned below to the target RNA: a. a polypeptide having $x_{a1}PGx_{a2}SWIEx_{a3}-x_{a16}HP \dots Hx_{aa}E \dots Cx_{a17}x_{a18}CH \dots$ DYW, having a sequence identity of at least 40% to the sequence of SEQ ID NO: 1, and having a C-to-U/U-to-C editing activity, b. a polypeptide having $x_{b1}PGx_{b2}SWWTDx_{b3}-x_{b16}HP \dots Hx_{bb}E \dots Cx_{b17}x_{b18}CH \dots$ DYW, having a sequence identity of at least 40% to the sequence of SEQ ID NO: 2, and having a C-to-U/U-to-C editing activity, c. a polypeptide having $KPAx_{c1}Ax_{c2}IEx_{c3} \dots Hx_{cc}E \dots Cx_{c4}x_{c5}CH \dots x_{c6}x_{c7}x_{c8}$, having a sequence identity of at least 40% to the sequence of SEQ ID NO: 3, and having a C-to-U/U-to-C editing activity, and bc. a polypeptide having $x_{b1}PGx_{b2}SWWTDx_{b3}-x_{b16}HP \dots Hx_{cc}E \dots Cx_{c4}x_{c5}CH \dots Dx_{bc1}x_{bc2}$, having a sequence identity of at least 40% to the sequence of SEQ ID NO: 90, and having a C-to-U/U-to-C editing activity (in the sequences, x represents an arbitrary amino acid, and ... represents an arbitrary polypeptide fragment).

No suitable figures to accompany with the abstract