

Fig. S9 The bracelet and two-lobe architectures for Class 2 effectors.

(a) The amino-acid regions within PRS domain that respectively interact with other parts of the Cas π R-loop complex. The other parts were shown by colored rectangles underlying the PRS cartoon.

(b) The structure and ‘bracelet’ model for Cas π . The protein part in the structure was traced with grey dash lines. Protein domains and nucleic acids were colored referring to Figure 6A. The stem elements in sgRNA are hidden for clear presentation.

(c) The representative structures for reported Class 2 effectors. The real structures for Cas12a, CasX, and Cas9 were shown on the left and bottom panels. The protein part (traced with grey dash lines) was colored in grey and nucleic acid part in cyan. The single strand region of NTS was hidden for clear presentation. The cartoon of two-lobe architecture for canonical Class 2 nuclease was shown on the top-right panel.