

Fig. S1 Structural comparison of xCas9 3.7/GAT and xCas9 3.7/AAG

- **a.** Domain organization of xCas9 3.7. BH, bridge helix; PI, PAM-interacting domain. Color coding is as in Fig. 1a.
- **b.** Cartoon representation of the xCas9 3.7/sgRNA/DNA complex.
- **c.** Superimposition of the overall structures of xCas9 3.7/GAT (purple) and xCas9 3.7/AAG (slate).
- d. Structural comparison of PI domains of xCas9 3.7/GAT (yellow) and xCas9 3.7/AAG (gray)