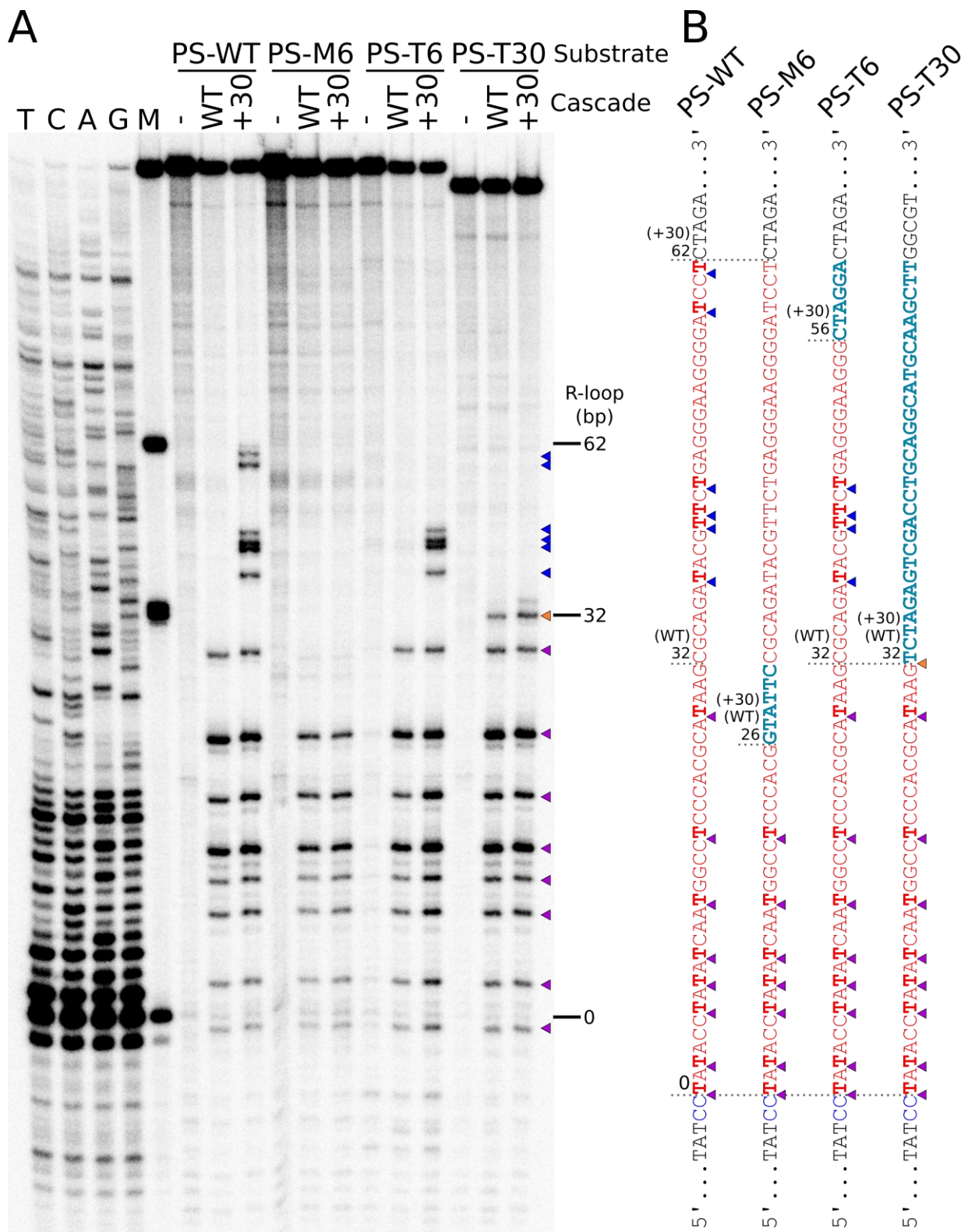


Additional file 9, Fig. S8



**Fig. S8.** R-loops formed by WT and extended Cascade upon interaction with protospacers of different length. **(A)** Denaturing polyacrylamide gel of DNA duplex footprints. DNA duplexes PS-WT, PS-M6, PS-T6 and PS-T30 were <sup>32</sup>P-labelled on the non-target DNA strand then pre-incubated with WT or +30 Cascade complex and treated with KMnO<sub>4</sub>. T, C, A, G lanes represent sequencing reactions for the

non-target strand of the PS-WT duplex using  $^{32}\text{P}$ -5'-labelled TS911 oligonucleotide. Boundaries for the expected 32 and 62 bp length R-loops are indicated in the M lanes. **(B)** *The sequence of the non-target strands*. The protospacer region and PAM are coloured in red and blue, respectively. Nucleotides mismatching the PS-WT protospacer are coloured in cyan. Triangles of different colours on the right of the gel **(A)** and within non-target strand sequences **(B)** indicate cleavage positions near accessible thymidines (bold). Expected lengths of the R-loops formed upon binding of WT or +30 Cascade complexes (specified in parentheses) to DNA target are indicated beside the sequences.