A Single-Strand DNA Incorporation

Paired nicking (PAM-out)

Extensive 5' resection

Single-strand DNA incorporation into gaps of different sizes

Strand displacement

Flap cleavage, ligation and single-strand gap repair

(5) Predicted SNP retention

B Synthesis-Dependent Strand Annealing

Paired nicking (PAM-in)

Minimal 3' processing

Strand invasion and synthesis

Strand annealing

Flap cleavage, ligation and single-strand nick repair

(6) Predicted SNP retention

Supplemental Figure S6. Mechanisms of paired-nick-induced PGE using the AS ODNs. (A) Repair of the PAM-out double nicks via ssDI. (B) Repair of the PAM-in double nicks via SDSA. All schematic elements are colored and defined as in the legend to Fig. 3.