**Figure S6.** Data from Fig. 6 represented in bar graphs, along with examining the parental RMD-GFP reporter in Msh2-/- mESCs. Shown is RMD frequency data from (A) Fig. 6A, and (B) Fig. 6B, represented as bar graphs. Also shown is the analysis of the RMD-GFP parental reporter in Msh2-/- mESCs, which were transfected with the respective sgRNA/Cas9 expression vectors, along with a control EV, or MSH2 complementation vector. Shown are the %GFP+ frequencies normalized to transfection efficiency, along with the WT frequencies from Fig. 6A (N=15), N= 9 for Msh2-/- mESCs. Error bars indicate s.d. *P≤ 0.001 comparisons vs. Msh2-/- EV, using One-way ANOVA with Dunnett’s Test.