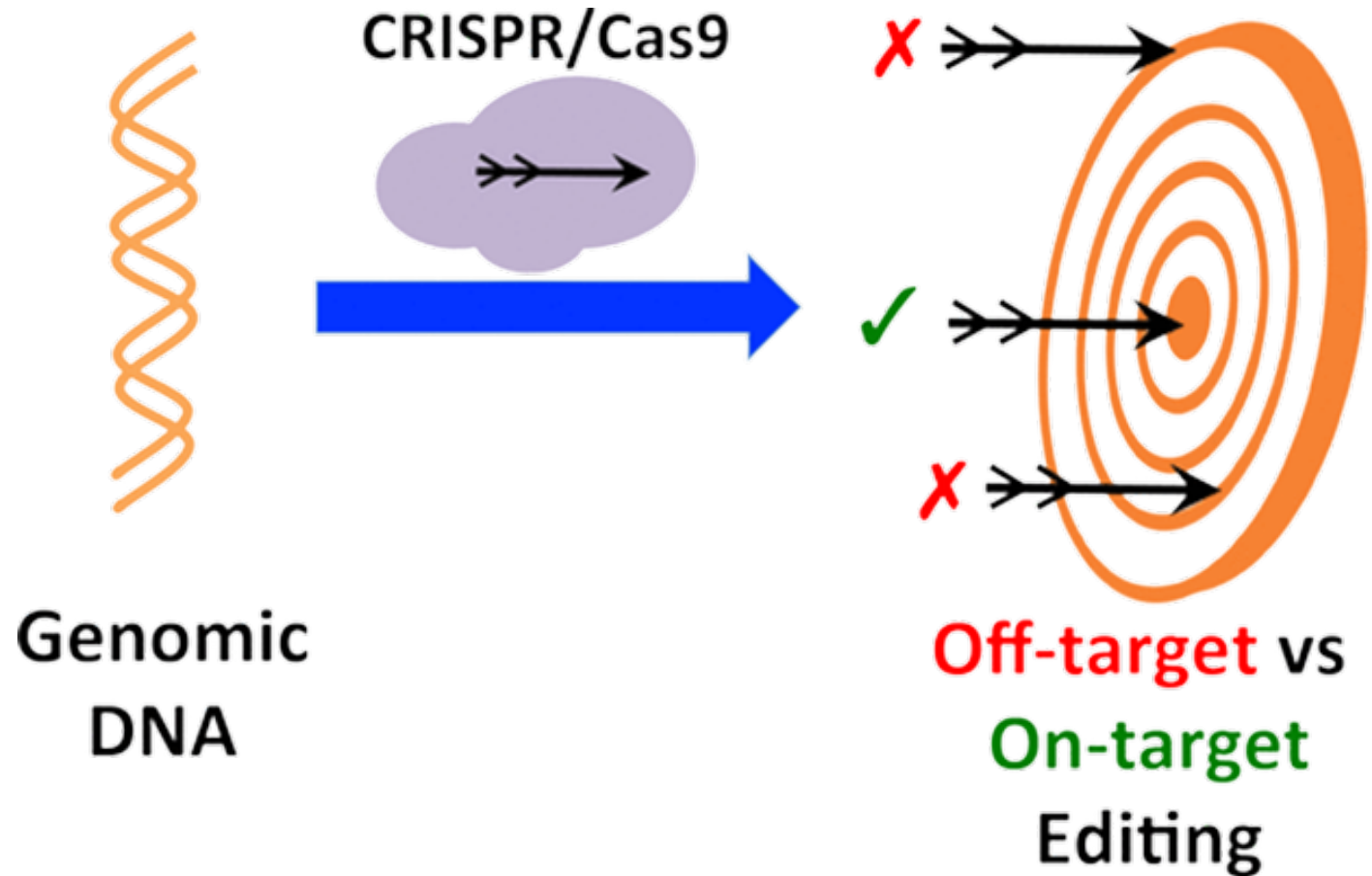


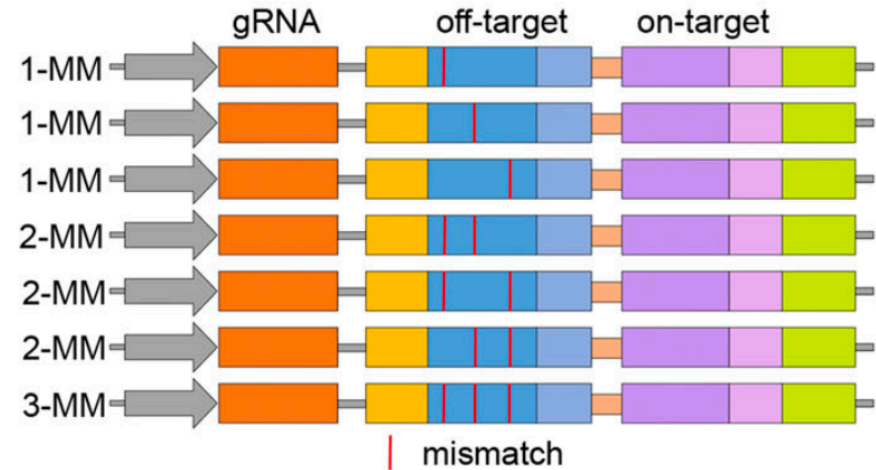
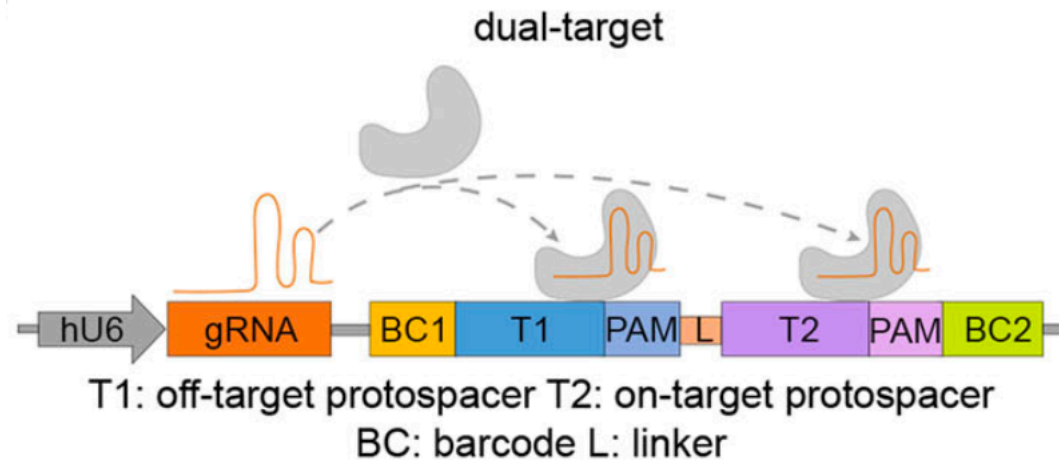
CRISPR 脱靶效应 (上)



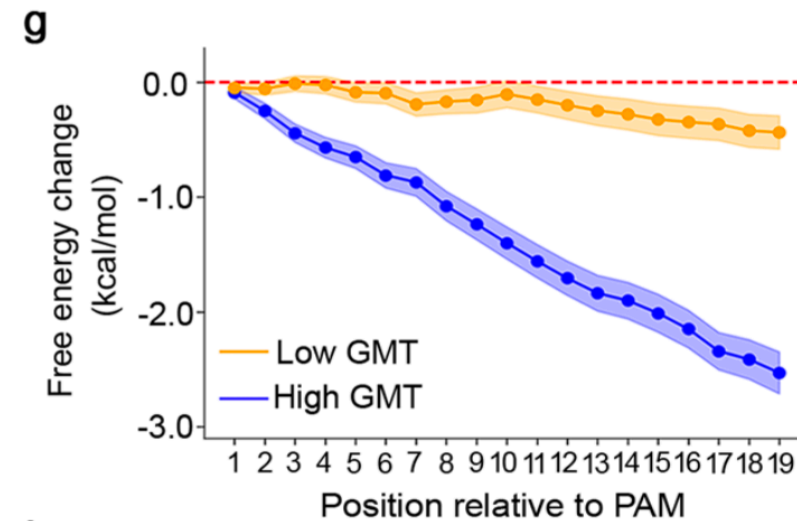
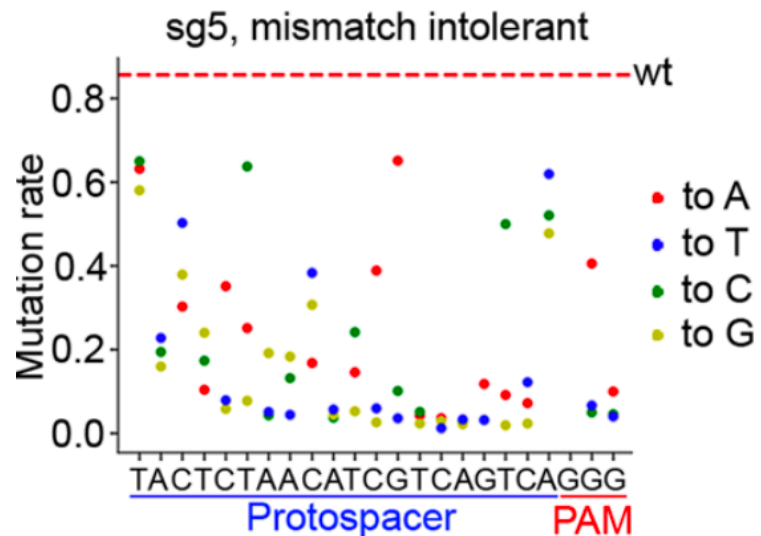
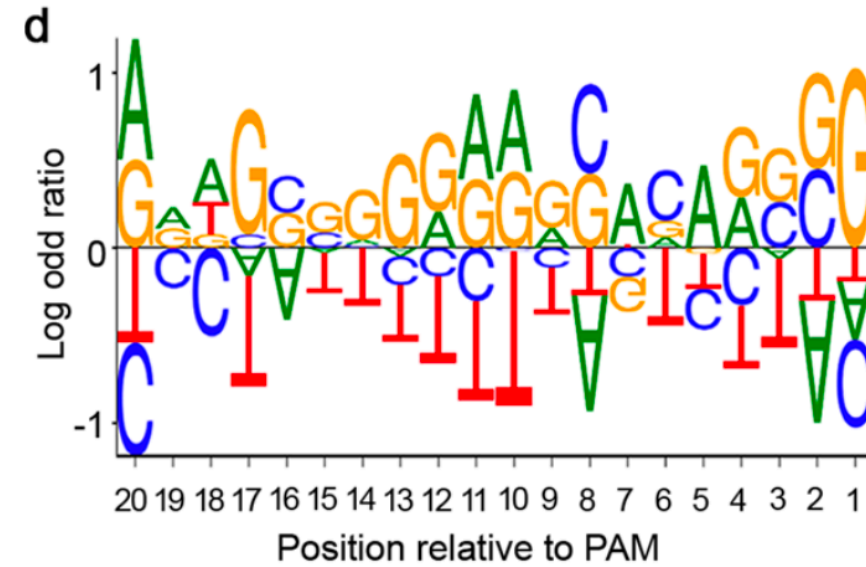
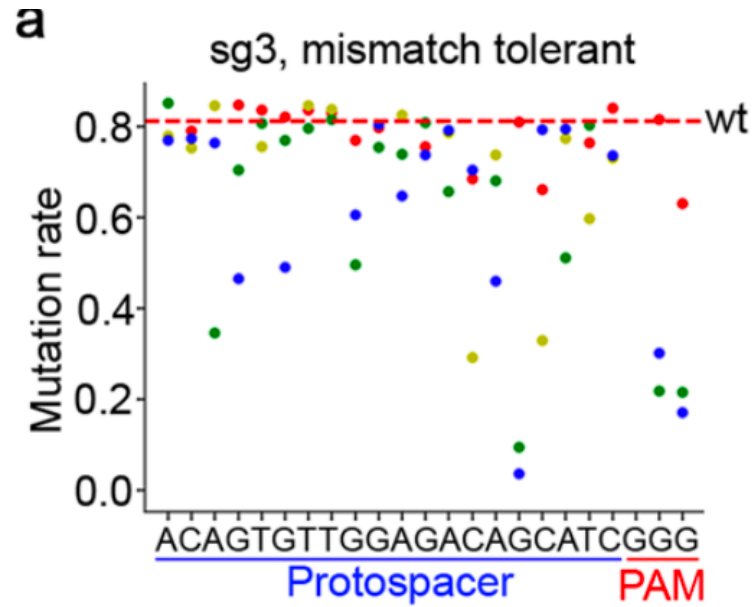
From beginner to expert



Experimental design for CRISPR off-target study

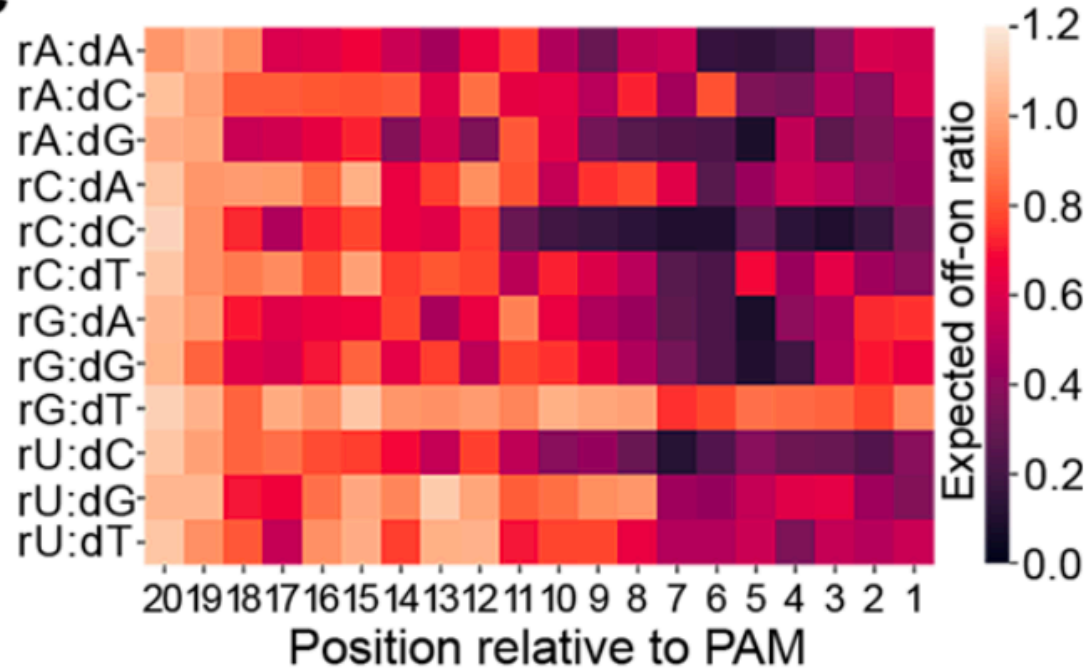


Guide-intrinsic mismatch tolerance (GMT)

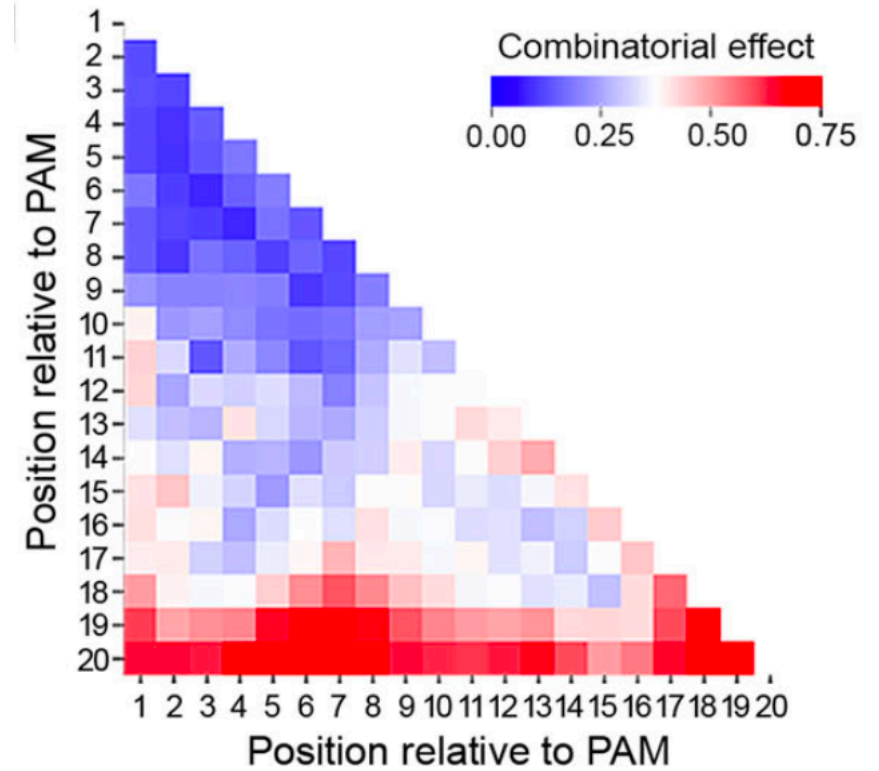


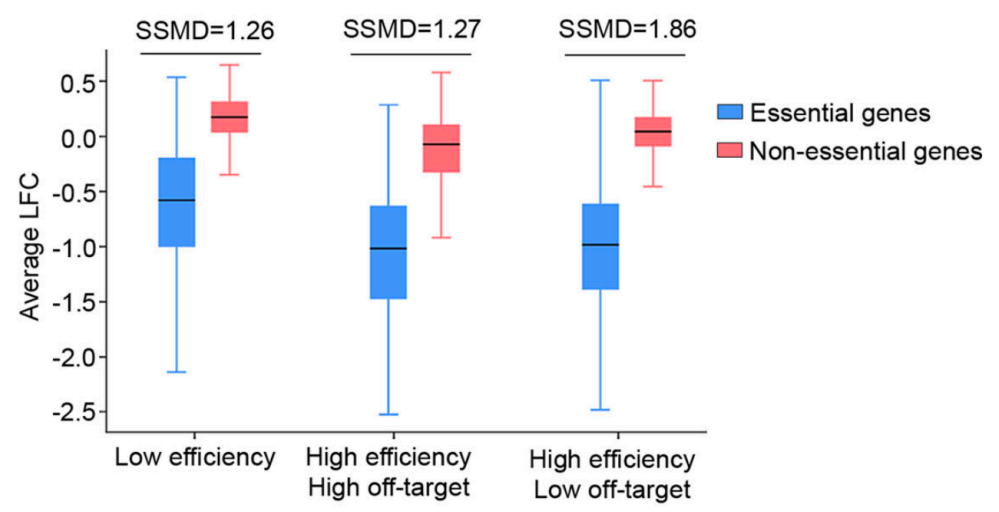
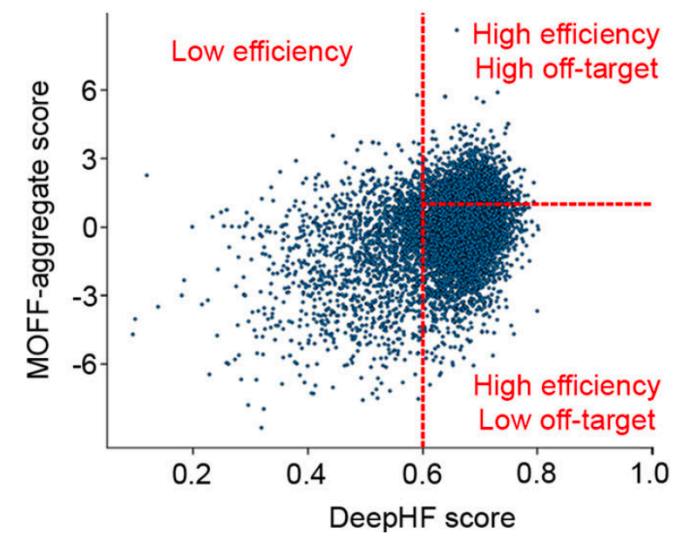
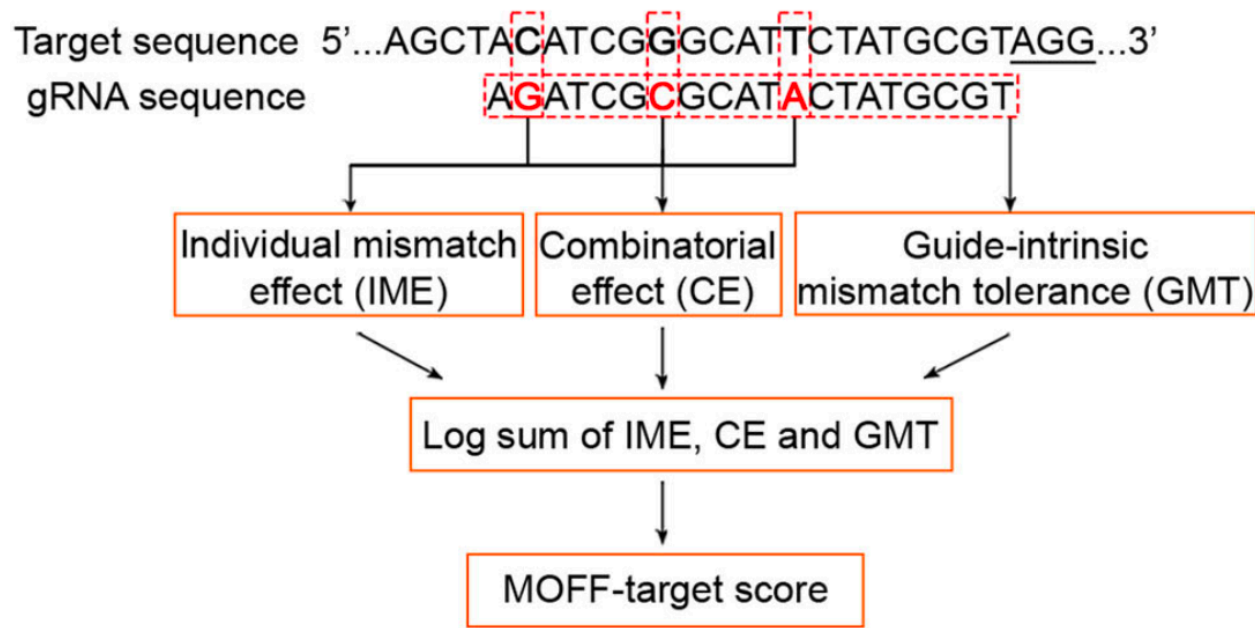
Single-mismatch effects

C



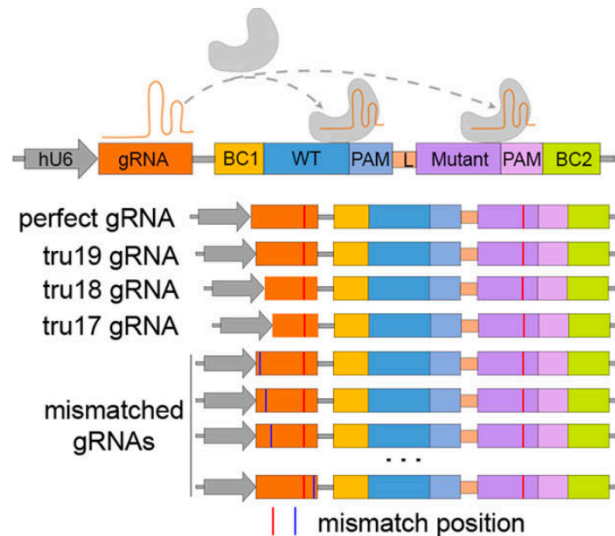
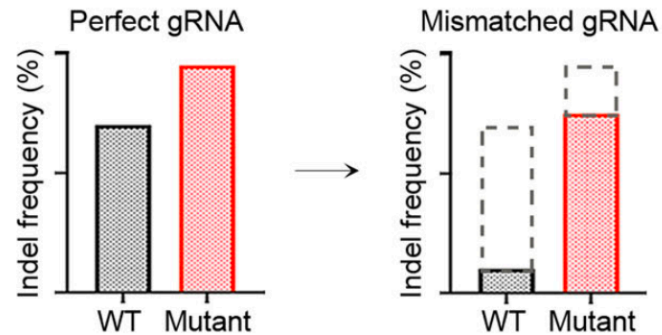
Combinatorial effects





Allele-specific knockout using mismatched sgRNA

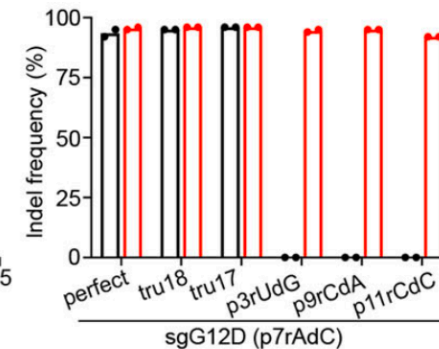
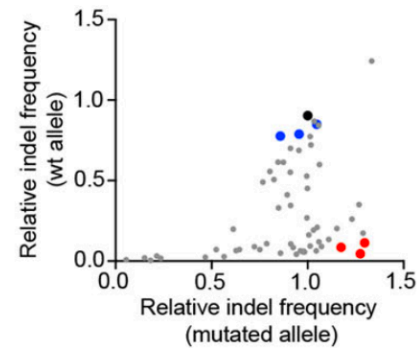
KRAS WT: GTAGTTGGAGCTGGTGGCGTAGGCAA
 KRAS G12D: GTAGTTGGAGCTGATGGCGTAGGCAA
 Perfect gRNA: GTAGTTGGAGCTGATGGCGT
 Mismatched gRNA: GTAGTTGGAGCGATGGCGT



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Mutation in seed region

KRAS WT: GTAGTTGGAGCTGGTGGCGTAGG
 KRAS G12D: GTAGTTGGAGCTGATGGCGTAGG



- perfect gRNA • truncated gRNA
- validated mismatched gRNAs
- other mismatched gRNAs
- WT allele □ Mutated allele

p53 WT: GCATGGGCGGCATGAACCGGAGG
 p53 R248W: GCATGGGCGGCATGAAC^TGGAGG

