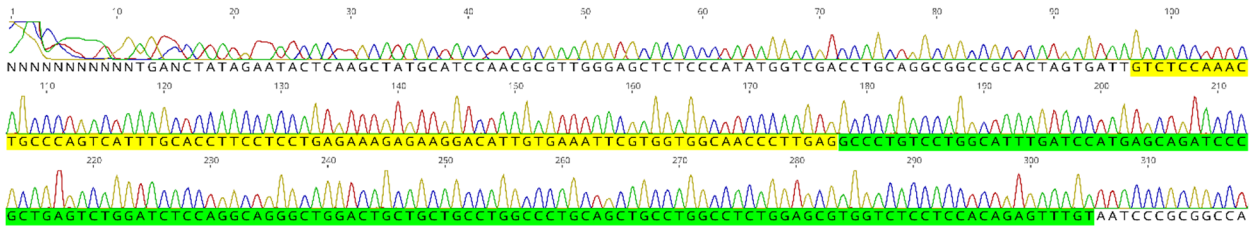


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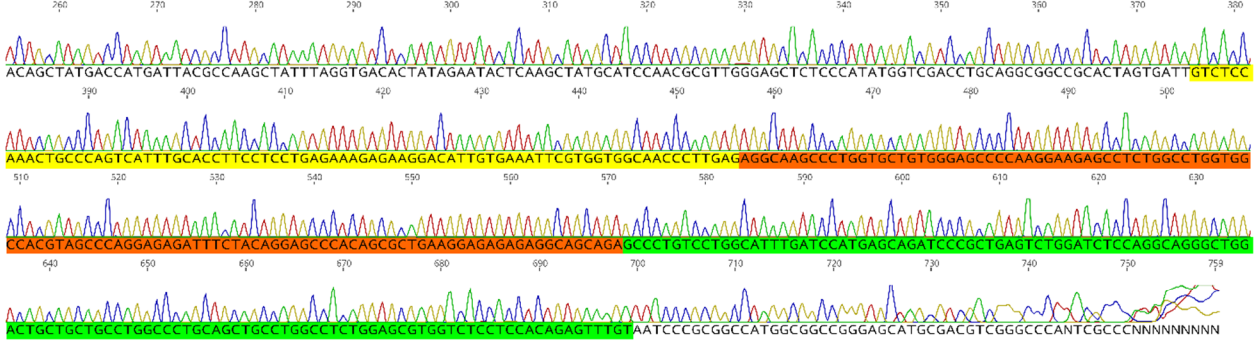
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# Supplementary Figure 1

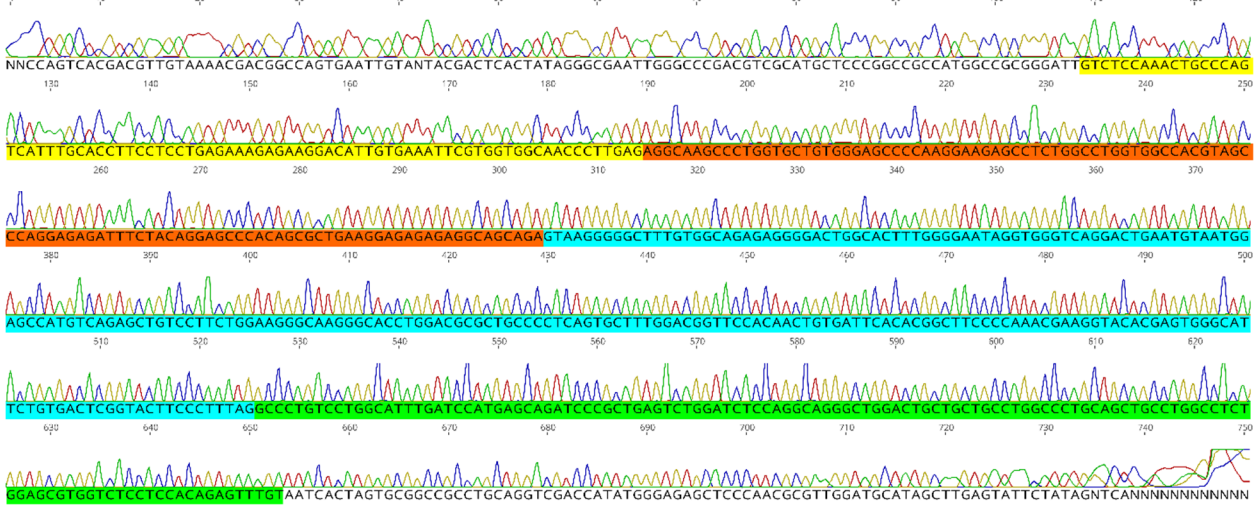
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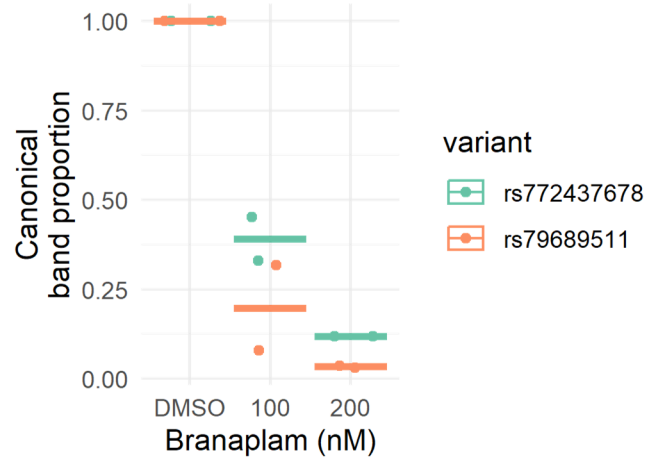
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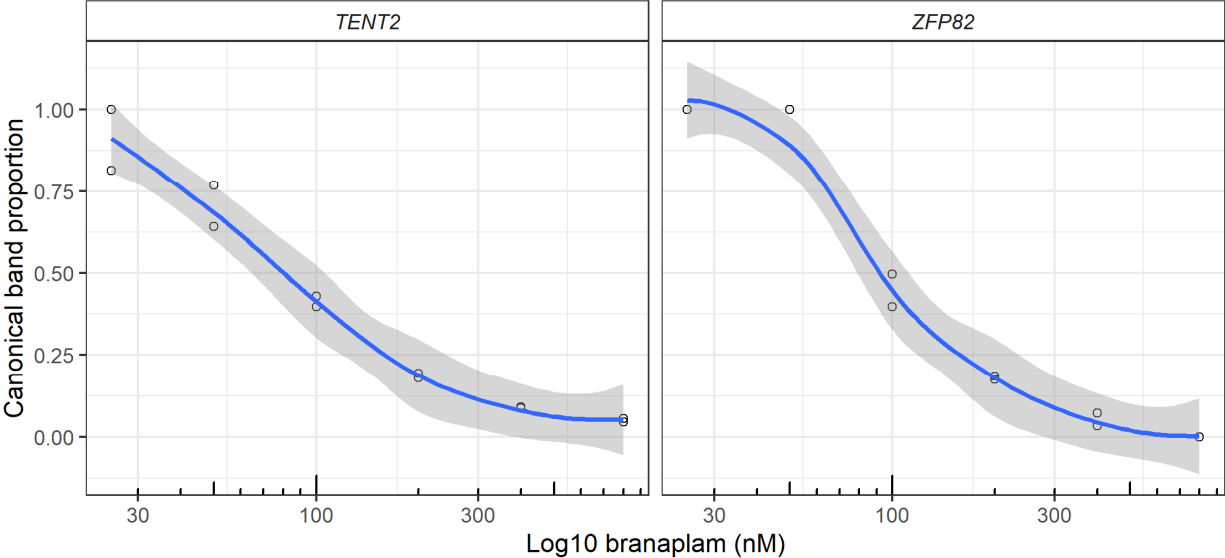
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## Supplementary Figure 2

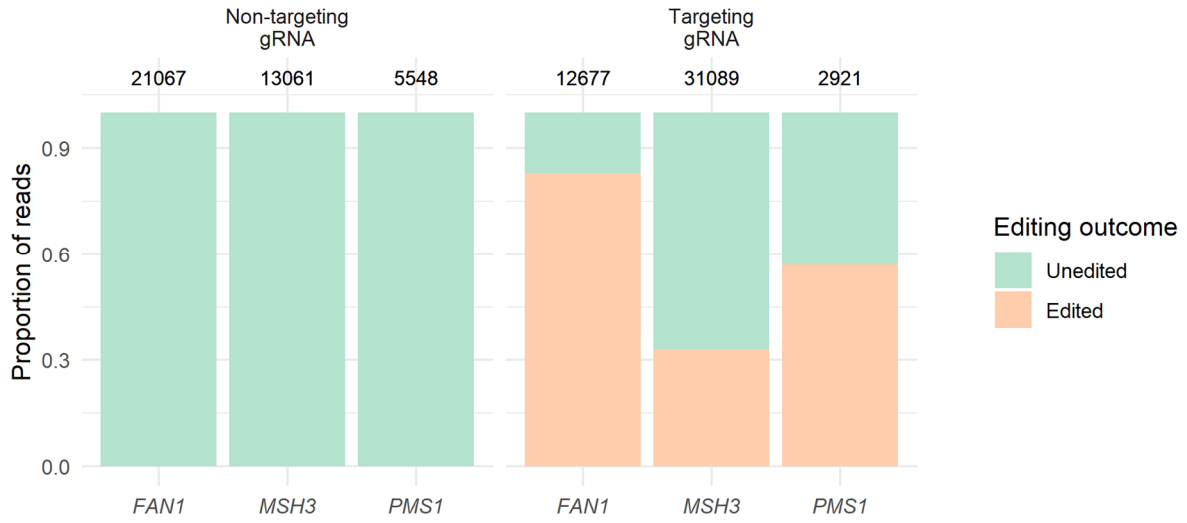


Supplementary Figure 3

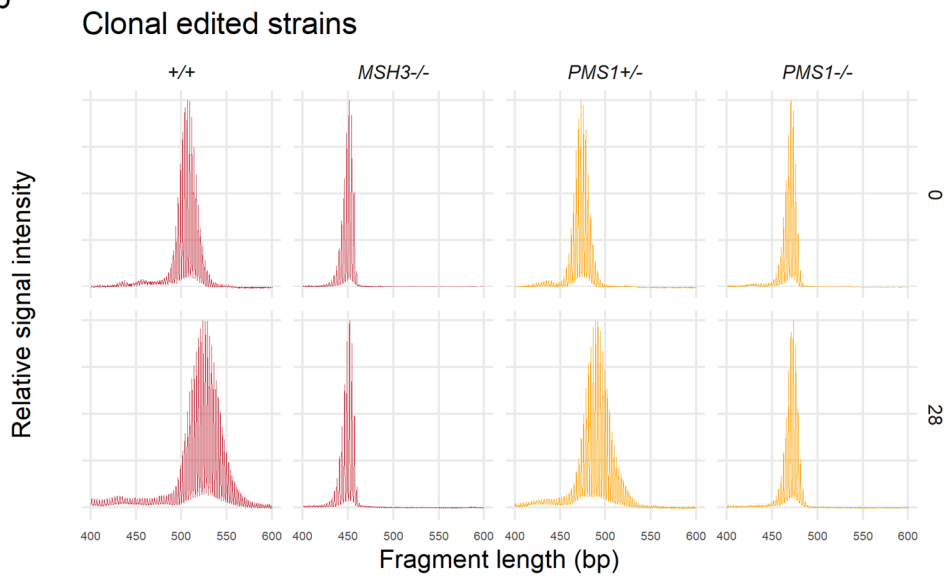


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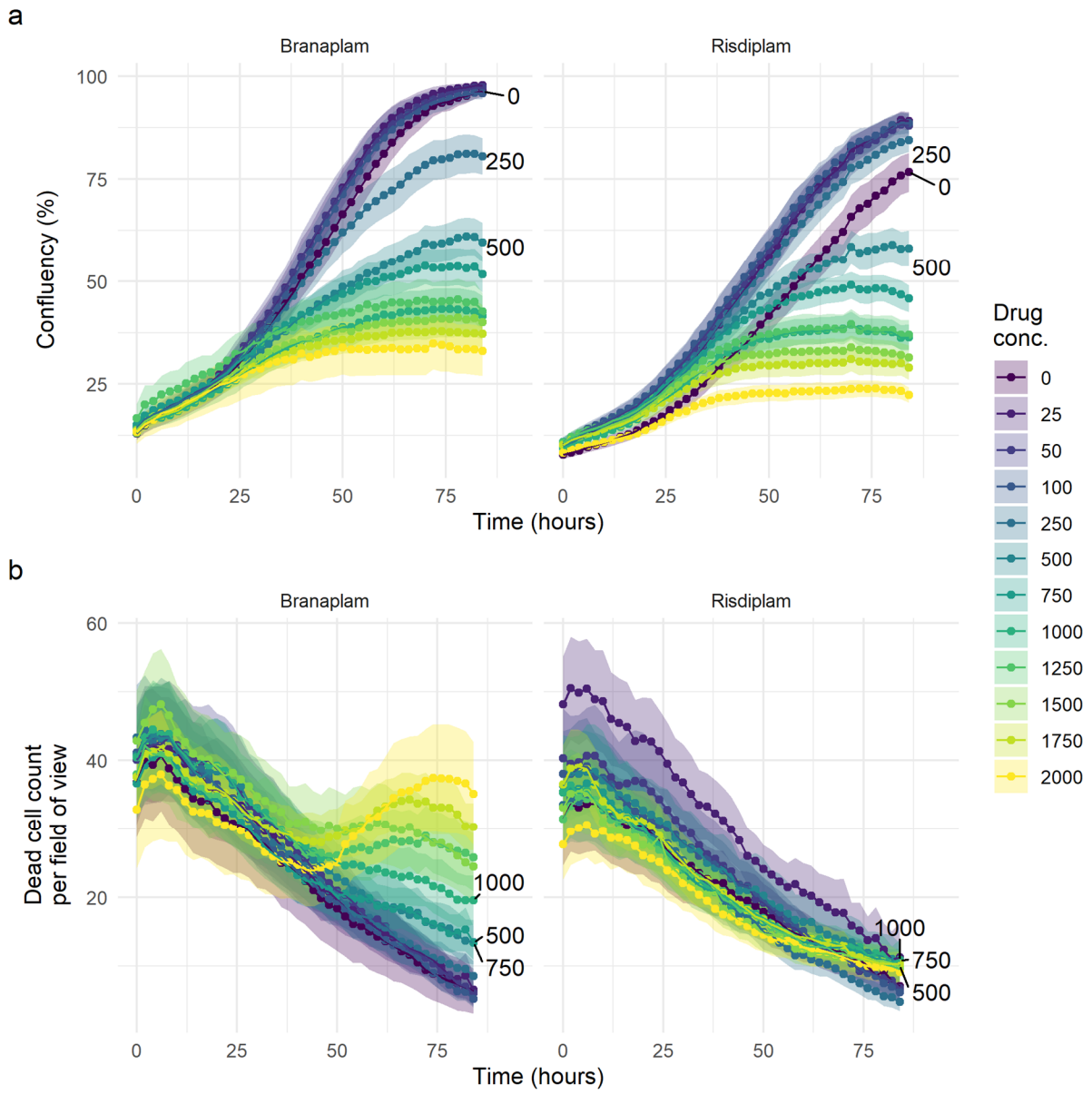
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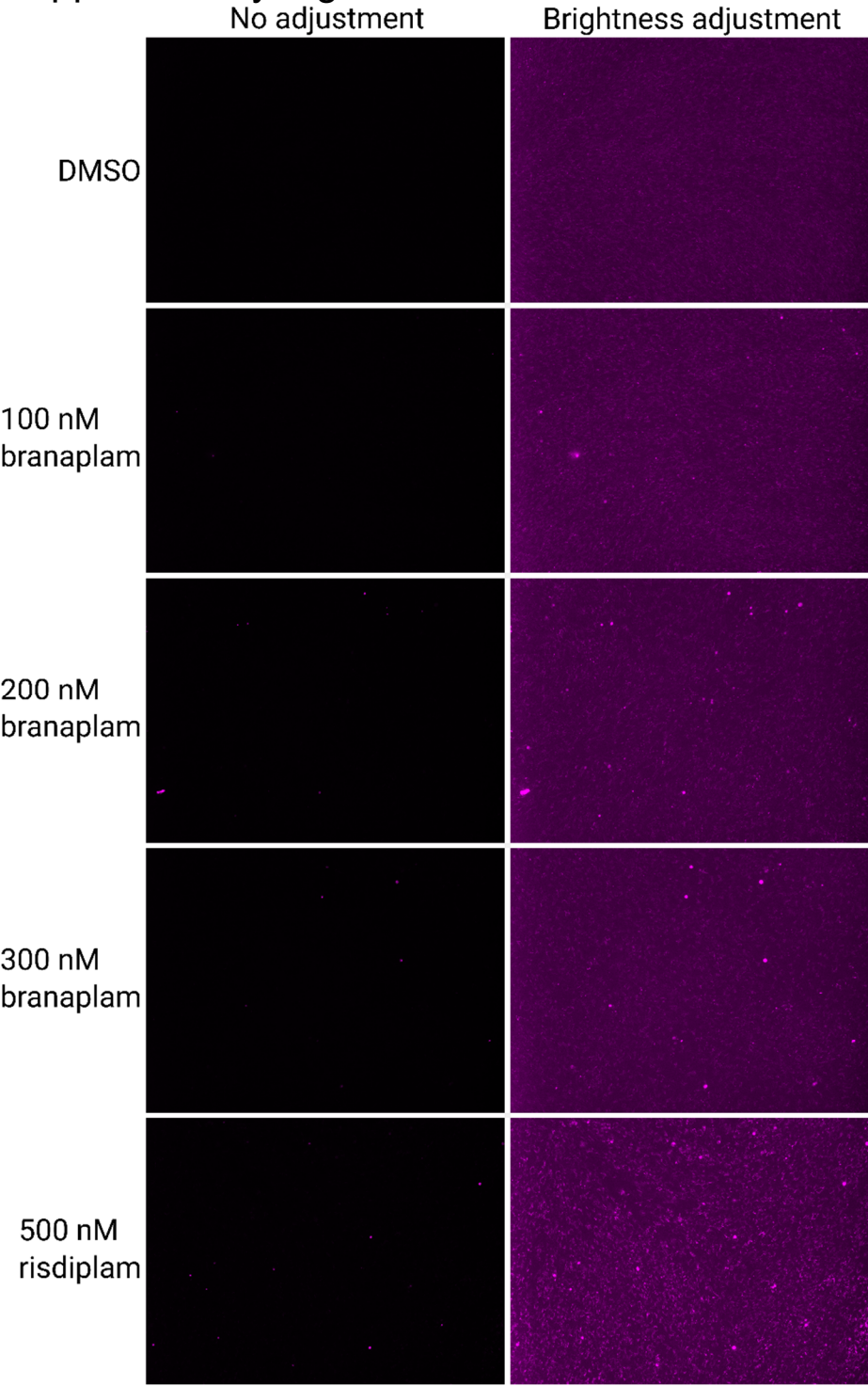
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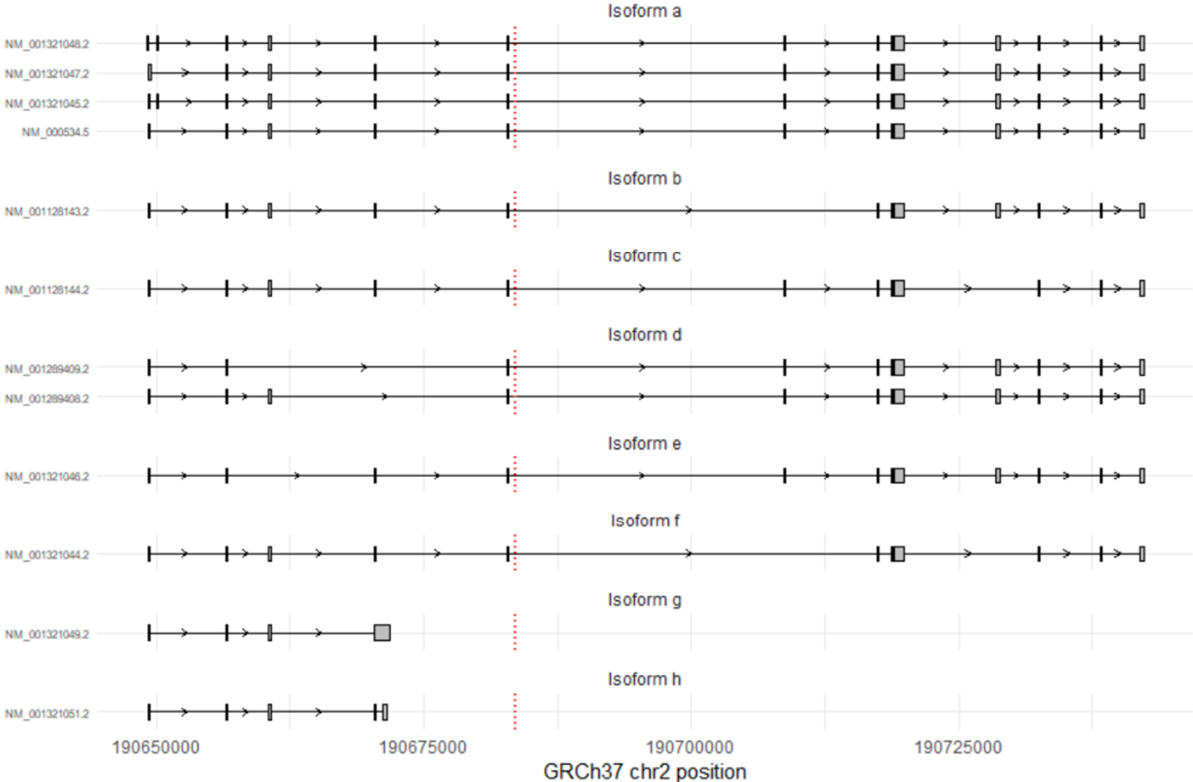
# Supplementary Figure 5



Supplementary Figure 6



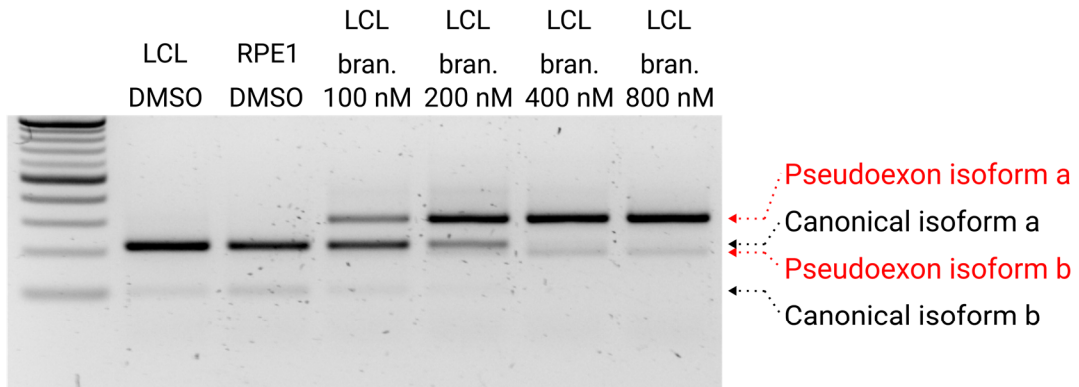
# Supplementary Figure 7



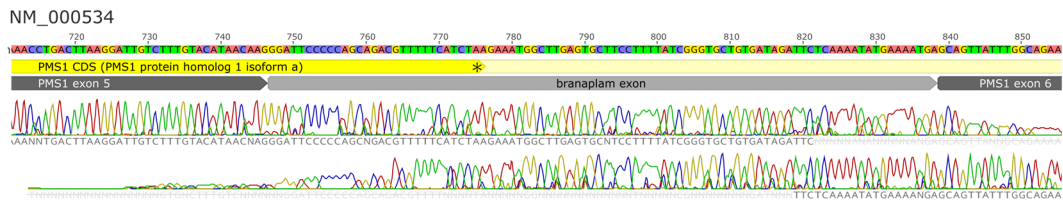


# Supplementary Figure 8

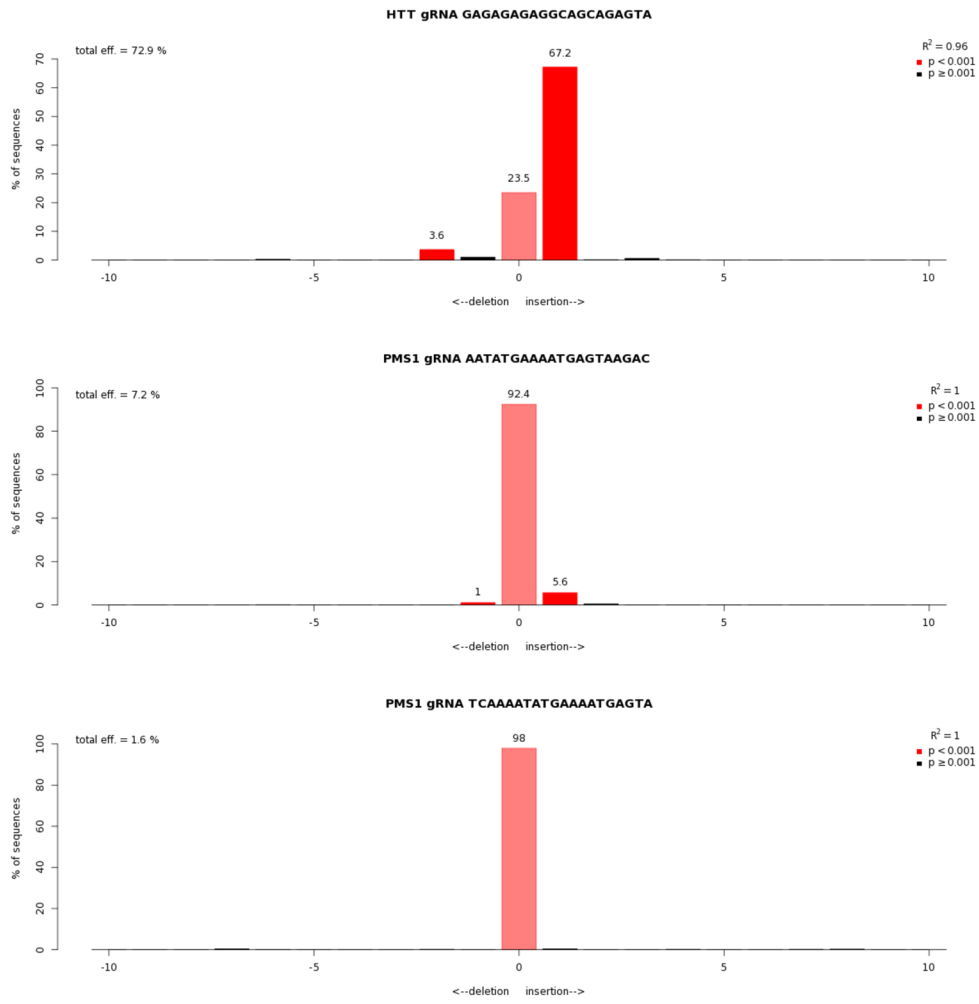
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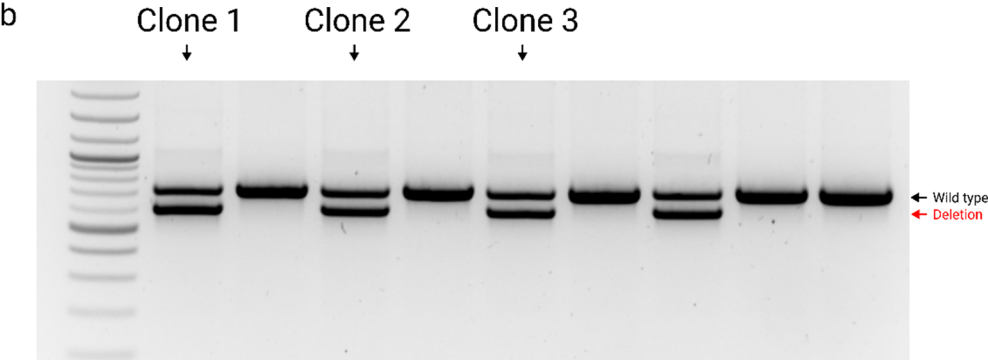
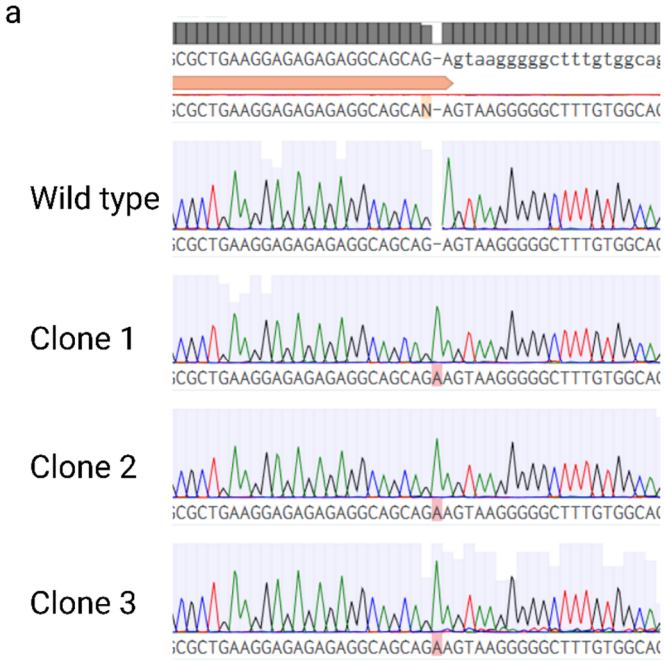
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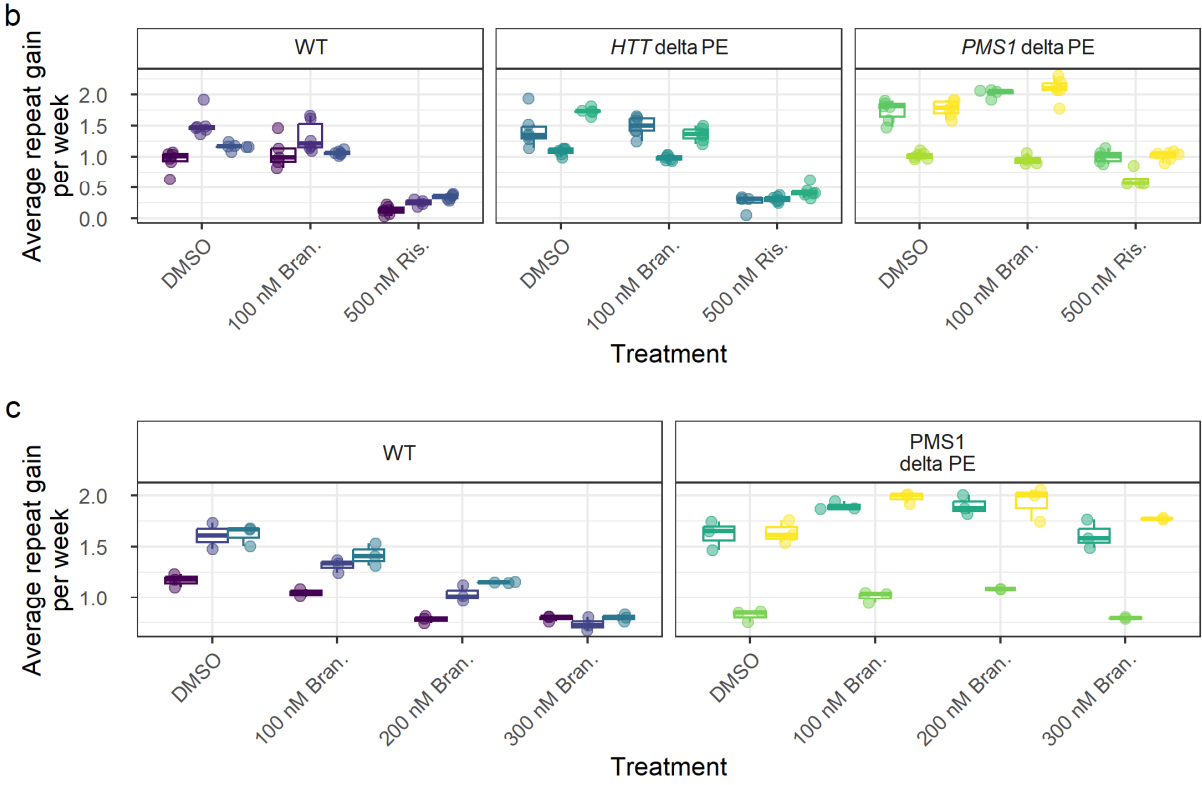
# Supplementary Figure 9



# Supplementary Figure 10



# Supplementary Figure 11





## Supplementary Table 1: primers

Name	sequence
<i>HTT</i> exon 49 F	GTCTCCAAACTGCCAGTCAT
<i>HTT</i> exon 50 R	ACAAACTCTGTGGAGGAGACC
<i>HTT</i> exon 49-50 probe	/56-FAM/AACCCTTGAG/ZEN/GCCCTGCCT/3IABkFQ/
<i>SDHA</i> F	TTTGATGCAGTGGTGGTAGG
<i>SDHA</i> R	CAGAGCAGCATTGATTCCTC
<i>SDHA</i> probe	/56-FAM/AG CCT AAG A/ZEN/T GAG AGT TCA AGT TGA GTT TGG /3IABkFQ/
<i>HTT</i> exon 49 cloning F	ACCATGGGGGATGCTGCACTGTATCAG
<i>HTT</i> exon 49 cloning R	GGCCTCCAGGATGAAGTG
Minigene SDM -1G>C F	GGCAACCCTTGACgtaagaggcagctcgggag
Minigene SDM -1G>C R	gctgcctcttacGTCAAGGGTTGCCACCAC
Minigene SDM -1G>A F	GGCAACCCTTGAAgtaagaggcagctcgggag
Minigene SDM -1G>A R	gctgcctcttacTTCAAGGGTTGCCACCAC
Minigene SDM -1G>T F	GGCAACCCTTGATgtaagaggcagctcgggag
Minigene SDM -1G>T R	gctgcctcttacATCAAGGGTTGCCACCAC
<i>HTT</i> exon 1 cloning primers with Sall F	CATGTACGgtcgacaccgccATGGCGACCCTGGAAAAGCTG
<i>HTT</i> exon 1 cloning primers with Sall R	CATGTACGgtcgacTCGGTGCAGCGGCTCCTC
AAVS1 5' homology arm F	CTGCCGTCTCTCCTGAGT
AAVS1 5' homology arm R	GTGGGCTTGTACTCGGTCAT
CAG repeat sizing 1st PCR F (CAG1)	ATGAAGGCCTTCGAGTCCCTCAAGTCCTTC
CAG repeat sizing 1st PCR R (EGFP R)	GTCCAGCTCGACCAGGATG
CAG repeat sizing 1st PCR F (CAG1)	/56-FAM/ATGAAGGCCTTCGAGTCCCTCAAGTCCTTC
CAG repeat sizing 1st PCR R (Hu3)	GGCGGCTGAGGAAGCTGAGGA
<i>FAN1</i> KO NGS F	AGTGTTGAAAACGTGAGGCA
<i>FAN1</i> KO NGS R	CCATTGCAGCTTGACCCCTGCT
<i>MSH3</i> KO NGS F	ATGCCCGGCTTGATGCTGTATCG
<i>MSH3</i> KO NGS R	AGTGCCTCAAGCTGAAGAACACTGT
<i>PMS1</i> KO NGS F	GCTGAGGATGAATGCAAAATATAGGA
<i>PMS1</i> KO NGS R	TCAGAGTGGTACTGAAAGGATTCCA
<i>PMS1</i> exon5 F	TCTCCTCATGAGCTTTGGTATCC
<i>PMS1</i> exon6 R	ACAGCAGTCCCAGAACTGA
<i>PMS1</i> ex5-6 probe	/56-FAM/TG TAC ATA A/ZEN/C AAG GCA GTT ATT TGG CAG A/3IABkFQ/
<i>PMS1</i> exon7 R	TGGTCTGCATCACACTTTGGA
<i>PMS1</i> int 5 F	AGGCACCACCTATGAACCAG
<i>PMS1</i> int 5 R	AGCAACAAGGATGGAAATGG

## Supplementary Table 2: sgRNAs

Target	sgRNA seq	PAM
<i>FAN1</i>	TGCATGGAGTAACATCCAAG	NGG
<i>MSH3</i>	AAATTGCCCGACATAGAGAG	NGG
<i>PMS1</i>	CAGAGTATCAGATCACAAGA	NGG
<i>HTT</i> pseudoexon 1	GAGAGAGAGGCAGCAGAGTA	NGG
<i>PMS1</i> pseudoexon 1	AATATGAAAATGAGTAAGAC	NGG
<i>PMS1</i> pseudoexon 2	TCAAAATATGAAAATGAGTA	NGA
<i>PMS1</i> pseudoexon flanking LHS	TTAGATGAAAAACGTCTGCT	NGG
<i>PMS1</i> pseudoexon flanking RHS	CAAAGAATCAACAGTGTAGA	NGG