

A GLM-7			D GLM-7-3-11		
A:	CGAGGCCAAGCTCGCGCCCTGCTACCCGGGGGCTGACGAC	WT 134 reads	A:	CGAGGCCAAGCTCGCGCCCTGCTACCCGGGGGCTGACGAC	WT 167 reads
	CGAGGCCAAGCTCGCGCCCTGCTAC--CGGGGGCTGACGAC	-1 4 reads		CGAGGCCAAGCTCGCGCCCTGCTAC--CGGGGGCTGACGAC	-1 164 reads
B:	CGAGGCCAAGCTCGCGCCCTGCTACCCGGGGGCTGACGAC	WT 134 reads		CGAGGCCAAGCTCGCGCCCTGCTACCTCGGGGGCTGACGAC	+1 2 reads
	CGAGGCCAAGCTCGCGCCCTGCTAC--CGGGGGCTGACGAC	-1 2 reads	B:	CGAGGCCAAGCTCGCGCCCTGCTACCCGGGGGCTGACGAC	WT 123 reads
	CGAGGCCAAGCTCGCGCCCTGCTA--CGGGGGCTGACGAC	-2 4 reads		CGAGGCCAAGCTCGCGCCCTGCTA--CGGGGGCTGACGAC	-2 2 reads
	CGAGGCCAAGCTCGCGCCCTGCT-----AC	-16 2 reads		CGAGGCCAAGCTCGCGCCCTGCTAC--CGGGGGCTGACGAC	-1 12 reads
D:	CGAGGCCAAGCTCGCGCCCTGCTACCCGGGGGCTGACGAC	WT 150 reads	D:	CGAGGCCAAGCTCGCGCCCTGCTACCCGGGGGCTGACGAC	WT 121 reads
				CGAGGCCAAGCTCGCGCCCTGCTAC--CGGGGGCTGACGAC	-1 164 reads
				CGAGGCCAAGCTCGCGCCCTGCTACCTCGGGGGCTGACGAC	+1 2 reads
B GLM-7-3			E GLM-7-3-20		
A:	CGAGGCCAAGCTCGCGCCCTGCTACCCGGGGGCTGACGAC	WT 74 reads	A:	CGAGGCCAAGCTCGCGCCCTGCTACCCGGGGGCTGACGAC	WT 138 reads
	CGAGGCCAAGCTCGCGCCCTGCTAC--CGGGGGCTGACGAC	-1 68 reads		CGAGGCCAAGCTCGCGCCCTGCTAC--CGGGGGCTGACGAC	-1 114 reads
	CGAGGCCAAGCTCGCGCCCTGCTA--CGGGGGCTGACGAC	-2 2 reads		CGAGGCCAAGCTCGCGCCCTGCTA--CGGGGGCTGACGAC	-2 9 reads
	CGAGGCCAAGCTCGCGCCCTGCT-----GGGGCTGACGAC	-5 2 reads		CGAGGCCAA-----GACGAC	-25 2 reads
B:	CGAGGCCAAGCTCGCGCCCTGCTACCCGGGGGCTGACGAC	WT 46 reads		CGAGGCCAAGCTCGCGC-----CCGCTGGG	-24 2 reads
	CGAGGCCAAGCTCGCGCCCTGCTAC--CGGGGGCTGACGAC	-1 2 reads		CGAGGCCAAGCTCGCGCCCTGCT--CCGGGGCTGACGAC	-1 1 reads
D:	CGAGGCCAAGCTCGCGCCCTGCTACCCGGGGGCTGACGAC	WT 118 reads		CGAGGCCAAGCTCGCGCCCTGCTACCTCGGGGGCTGACGAC	+1 2 reads
	CGAGGCCAAGCTCGCGCCCTGCTACTCGGGGGCTGACGAC	+1 2 reads	B:	CGAGGCCAAGCTCGCGCCCTGCTACCCGGGGCTGACGAC	WT 118 reads
	CGAGGCCAAGCTCGCGCCCTGCTAC--CGGGGGCTGACGAC	-1 2 reads		CGAGGCCAAGCTCGCGCCCTGCTAC--CGGGGGCTGACGAC	-1 66 reads
			D:	CGAGGCCAAGCTCGCGCCCTGCTACCCGGGGGCTGACGAC	WT 233 reads
C GLM-7-3-8				CGAGGCCAAGCTCGCGCCCTGCTAC--CGGGGGCTGACGAC	-1 12 reads
A:	CGAGGCCAAGCTCGCGCCCTGCTACCCGGGGGCTGACGAC	WT 126 reads		CGAGGCCAAGCTCGCGCCCTGCTACCTCGGGGGCTGACGAC	+1 8 reads
	CGAGGCCAAGCTCGCGCCCTGCTAC--CGGGGGCTGACGAC	-1 156 reads			
B:	CGAGGCCAAGCTCGCGCCCTGCTACCCGGGGGCTGACGAC	WT 330 reads			
	CGAGGCCAAGCTCGCGCCCTGCTACTCGGGGGCTGACGAC	+1 226 reads			
	CGAGGCCAAGCTCGCGCCCTGCTAC--CGGGGGCTGACGAC	-1 28 reads			
D:	CGAGGCCAAGCTCGCGCCCTGCTACCCGGGGGCTGACGAC	WT 261 reads			
	CGAGGCCAAGCTCGCGCCCTGCTACTCGGGGGCTGACGAC	+1 6 reads			
	CGAGGCCAAGCTCGCGCCCTGCTAC--CGGGGGCTGACGAC	-1 14 reads			
	CGAGGCCAAGCTCGCGCCCTGCTA--ACGGGGGCTGACGAC	-1 2 reads			
	CGAGGCCAAGCTCGCGCCCTGCTA--CGGGGGCTGACGAC	-2 2 reads			

SUPPLEMENTARY FIG. S7. Transgenerational CRISPR-Cas9 activity induces new mutations in the *TaGW2* gene. The GW2T2 target site was amplified and sequenced by NGS. All identified read types for **(A)** T₀ line GLM-7 and its **(B)** T₁, **(C-E)** T₂ progenies are shown. WT, wild-type alleles in wheat cultivar Bobwhite; “-” and “+” signs and numbers after them, nucleotides deleted and inserted, respectively. The detected numbers of each read type are shown on the right.