

Additional File 8. Mutation analysis of T1 transgenic plants of pUBQ10::CAS9-pU6::GONST2_gRNA1. Genomic DNA was extracted from leaves of T1 Plant4 and Plant6. The region surrounding the target site of GONST2_gRNA1 was amplified and cloned. Twenty individual clones from each line were sequenced by Sanger sequencing.

Clone Name	Mutation Type
Plant4 Clone 1	46 bp Del ¹
Plant4 Clone 2	A Ins
Plant4 Clone 3	Mix of 46 bp Del ¹ and A Ins
Plant4 Clone 4	7bp Ins ²
Plant4 Clone 5	A Ins
Plant4 Clone 6	A Ins
Plant4 Clone 7	A Ins
Plant4 Clone 8	46 bp Del ¹
Plant4 Clone 9	A Ins
Plant4 Clone 10	A Ins
Plant4 Clone 11	A Ins
Plant4 Clone 12	A Ins
Plant4 Clone 13	A Ins
Plant4 Clone 14	A Ins
Plant4 Clone 15	Mix of 46 bp Del ¹ and A Ins
Plant4 Clone 16	A Ins
Plant4 Clone 17	A Ins
Plant4 Clone 18	46 bp Del ¹
Plant4 Clone 19	A Ins
Plant4 Clone 20	A Ins
Plant6 Clone 1	19 bp Ins ³
Plant6 Clone 2	19 bp Ins ³
Plant6 Clone 3	T Insert
Plant6 Clone 4	Mix of T Ins and 19bp Ins ³
Plant6 Clone 5	19 bp Ins ³
Plant6 Clone 6	C Del
Plant6 Clone 7	C Del
Plant6 Clone 8	C Del
Plant6 Clone 9	19 bp Ins ³
Plant6 Clone 10	T Insert
Plant6 Clone 11	not matching
Plant6 Clone 12	T Insert
Plant6 Clone 13	no priming
Plant6 Clone 14	T Insert
Plant6 Clone 15	C Del
Plant6 Clone 16	T Insert
Plant6 Clone 17	T Insert
Plant6 Clone 18	19 bp Ins ³
Plant6 Clone 19	C Del
Plant6 Clone 20	not matching

¹The 46 bp deletion sequence is: CGGTTGATGGAGATAACAGGCGTGACCACGGGTCTGTGAAACAGTC

²The 7bp insertion sequence is: AAATCTT

³The 19bp insertion sequence is: CAAATTGTCACAGGATAGA