

**Table S1.** Primer sequences used in the present study.

Primer Name	Primer Sequence	Purpose
Primer1	ATTCATAACAAAGCAAACGAG	To amplify the region spanning the target site <i>GmFT2a</i> -D1
Primer2	ACTTGACCTTCCCTAACAC	
Primer3	TTGATCCCGATGCACCTAGC	To amplify the region spanning the target site <i>GmFT2a</i> -D2
Primer4	CTAGCAAGCAAACATTGTGCC	
Primer5	TGAGCGTCAAAGTAGATCAAG	To amplify the region spanning the target site <i>GmFT2a</i> -D3
Primer6	CTTGCTGCTACCAACTGAGC	
Primer7	ATCGACCGATCGAGGACAAC	To amplify the region spanning the target site <i>GmFT5a</i> -D1
Primer8	TGGGAGACTACAGAAGCAAAGA	
Primer9	ACCACAAATGCAAGCTTGGTAA	To amplify the region spanning the target site <i>GmFT5a</i> -D2
Primer10	TCAGCTGGAGTAAGGCATCCA	
Primer11	ACCCGTCAAGATCTCTTATT	To detect large fragment deletions between the target sites <i>GmFT2a</i> -D1 and <i>GmFT2a</i> -D2
Primer12	ACGAGTTAGGAATCAGTGTCA	
Primer13	TCAAACACAATGGAATCGAGGC	To detect large fragment deletions between the target sites <i>GmFT2a</i> -D1 and <i>GmFT2a</i> -D3
Primer14	CACCCACACAAATCCGAAAGT	
Primer15	GGAGAAAAGAAAACATTTCATCG	To detect large fragment deletions between the target sites <i>GmFT5a</i> -D1 and <i>GmFT5a</i> -D2
Primer16	CTCTAAAGTATCAGCTGGAGTAAGG	
<i>GmActin</i> -F	CGGTGGTTCTATCTGGCATC	To amplify <i>GmActin</i> as a normalization control.
<i>GmActin</i> -R	GTCTTTCGCTTCAATAACCCTA	
Cas9-F	TTGGGGCTCACACCAAACCTT	To amplify part of the Cas9 coding sequence
Cas9-R	CGATCGCCTTCTTTGCTCG	