Figure S4.—Screening and characterization of a GmGIa mutant line. (A) A mutant library comprising of approximately thirty one thousand of M2 plants were examined. Formation of a heteroduplex and following CEL I digestion of the PCR fragment, amplified from a mixed template of the mutant and wild type DNA (M/C), exhibits a specific truncated DNA band because of mismatch sequences as determined by agarose gel electrophoresis. On the other hand, a non-mixed template (M/M) does not show the specific band. Mutation sites detected in each mutant was validated by direct sequencing of the PCR fragment. (B) One mutant line, 244-A-7, harboring a single nucleotide deletion in the 10th exon, and causing a premature stop codon, was used in the phenotypic evaluation (see text).