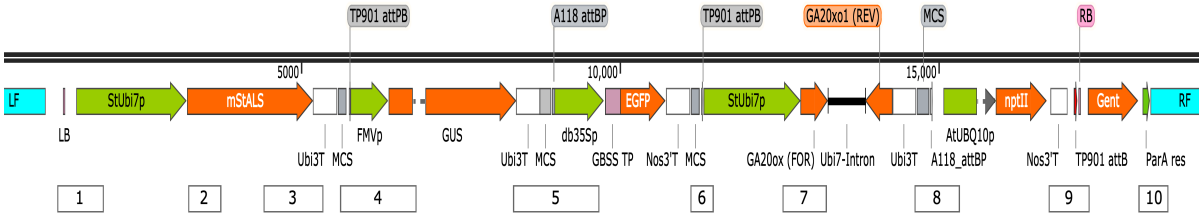
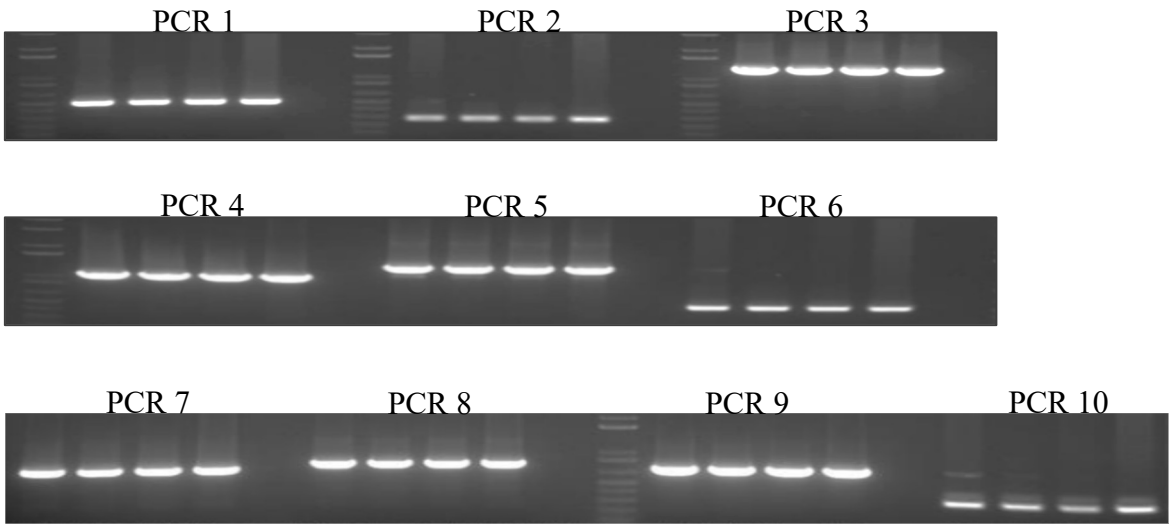
A



B



Supplementary Figure S5. Diagram of the 5-stack JGT5046 GA*A*NTRY strain and PCR validation of the cargo sequences. A) Illustration of the 15.8kb 5-stack JGT105 G*AA*NTRY strain. Each arrow depicts either the regulatory components or the gene of interest. For a simplified version of the T-DNA see Figure 1. White numbered rectangles depict the Polymerase chain reaction (PCR) amplicons spanning the junctions between each cargo. B) Gel electrophoresis of the PCR reactions used to verify the 5-stack T-DNA integrity. DNA molecular weight ladder is shown on the top right corner (bp) Supplemental table 1 summarizes the primers used and the expected size of the amplicons for each reaction. Five different DNA samples were tested for each PCR reaction: 1) original culture, 2) pre competent cell culture, 3) glycerol stock, 4) competent cell stock, and 5) negative control JGT105 non-transformed construct. 5th lane for PCR 10 not shown

2 weeks after propagation in rooting medium

A

pBi5045 JGT5046 WT



4 weeks after propagation in rooting medium

B

pBi5045 WT JGT5046 WT

Line 21 Line 33 Line 2 Line 3



Supplementary Figure S6. Representative phenotypes of 5-stack harboring events showing GAox-1 deficiencies compared to WT events. A) Transgenic potato shoots rooting in media containing Kanamycin 50 mg/L. B) For GAox-1 plant height comparison of binary (pBi5045) and GAANTRY(JGT5046). Phenotypic results considered highly variable and undependable. As such PCR validation was used for confirmation GAox-1gene presence.