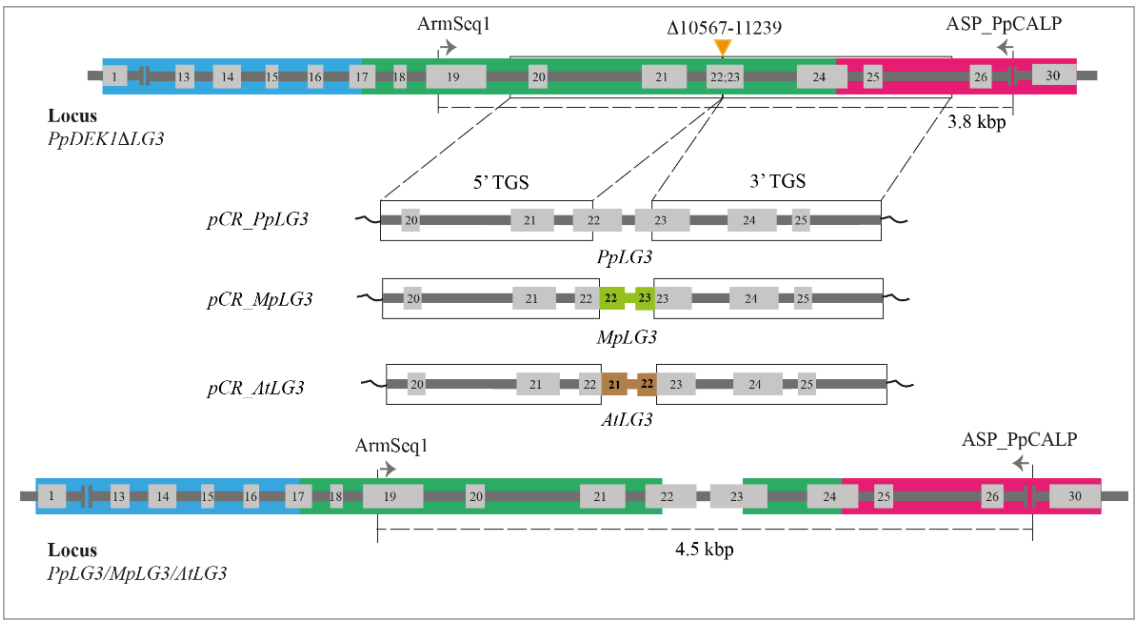
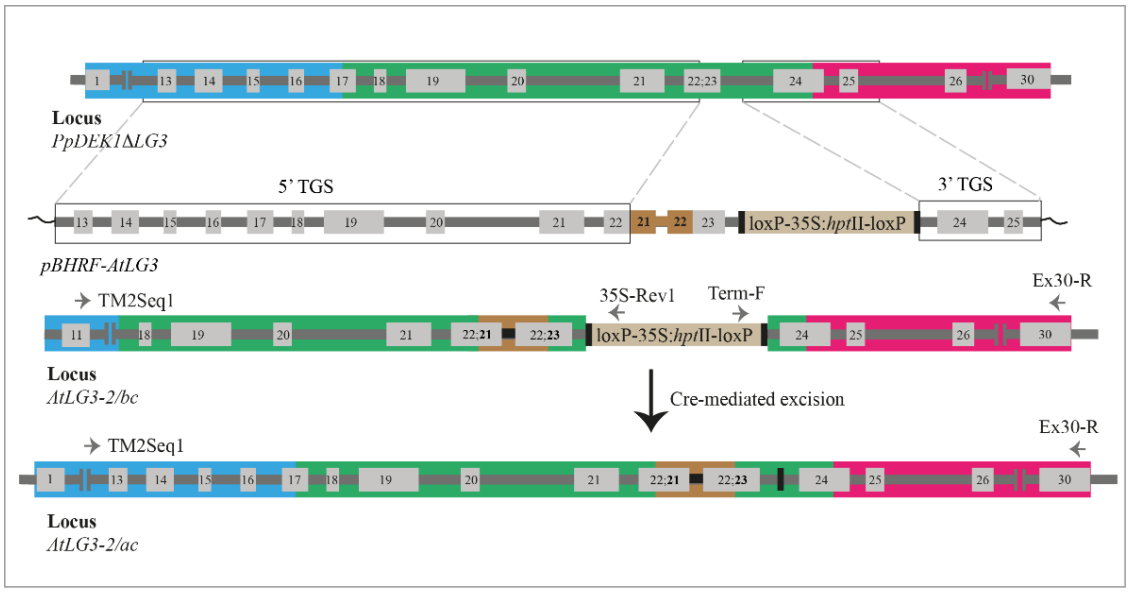
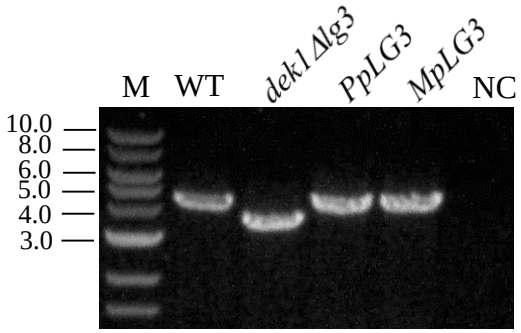
Supplemental Figure S5







Supplemental Figure S5. Vector construction, targeted knock-in of *Physcomitrella patens*, *Marchantia polymorpha* and *Arabidopsis thaliana DEK1 LG3*, and PCR genotyping. A, Schematic representation of gene targeting using the *pCR-PpLG3*, *pCR-MpLG3* and *pCR-AtLG3* vectors. Blue, dark green, yellow and red highlights represent DEK1 MEM, Linker, LG3 and calpain sequences, respectively (for the DEK1 protein domains, see Figure 1A). The yellow triangle with numbers shows the position of the deleted *DEK1* nucleotides. The numbers in the grey, light green and brown boxes correspond to the exons of the *P. patens*, *M. polymorpha* and *A. thaliana DEK1* genes, respectively. The 5' and 3' targeting sequences (TGS) are boxed. Annealing sites for primers used for PCR genotyping are shown with arrows (primer sequences can be found in Supplemental Table S3) and the expected band sizes of the PCR amplicons are also given. *At* = *A. thaliana*, *Mp* = *M. polymorpha*, *Pp* = *P. patens*. B, PCR genotyping analysis of WT, *dek1Δlg3*, *PpLG3* and *MpLG3* using primers *ArmSeq1* and *ASP_PpCALP* showing amplicons of the expected sizes. M=marker, NC=negative control. C, Schematic representation of gene targeting using the *pBHRF_AtLG3* vector and elimination of the resistance cassette by Cre-mediated excision. The color code is the same as used in (A). Annealing sites for primers used for PCR genotyping are shown with arrows (primer sequences can be found in Supplemental Table S3).