



Figure S1. Schematic representation of *P. patens* protoplast co-transformation with CRISPR-Cas9 multiplex system.

The sgRNA is composed of a CRISPR RNA (crRNA) sequence in orange (20 nucleotides, specific for each gene) and the trans-activating crRNA (tracrRNA) sequence in green (common to all sgRNAs). AttB regions are shown in black, *P. patens* U3 promoter is shown in red and *P. patens* U6 promoter is shown in blue.