

Fig. 1 Suppl. *A* - *Arabidopsis thaliana* non-annotated RNA (AtNAR01, AtNAR15, and AtNAR27) expressions under cold and drought stresses. Soil-grown seedlings (control) were either dehydrated or treated at 5 °C for 10 h. The total RNA was isolated and reverse-transcribed for PCR amplification with gene-specific primer sets. The RT-PCR products were electrophoresed on 1.0 % (m/v) agarose gels. *B* - *Cis*-acting elements in the drought resistance gene (*DRG*) promoter. Dehydration responsive elements (DRE; CCGAC), abscisic acid responsive elements (ABRE; CACGTG), and transcription induction factors (MYC; CAGATG) are marked. Numbers are given from the initiation codon.

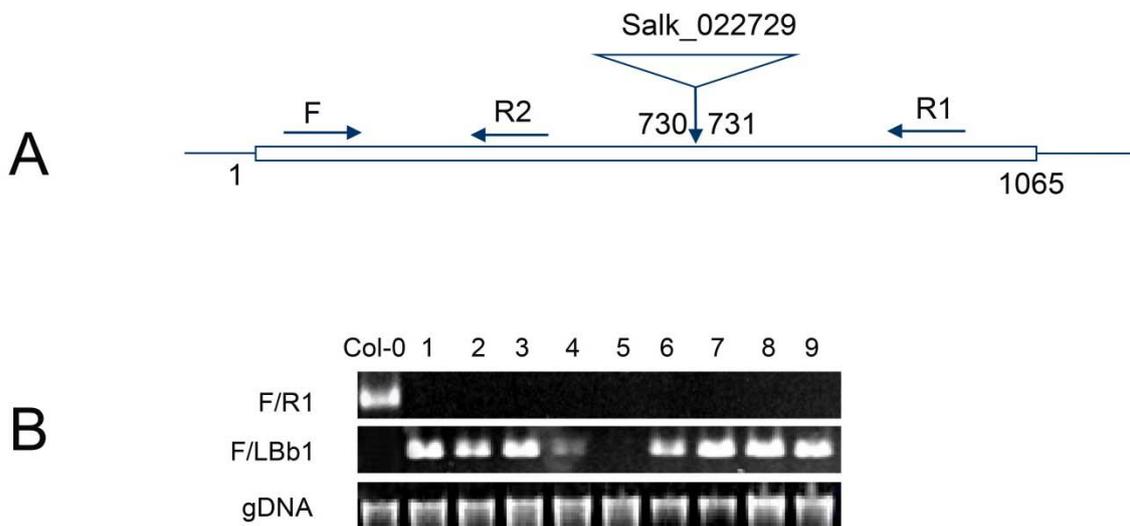


Fig. 2 Suppl. *A* - The map of the T-DNA insertion and primer locations in the Salk\_022729 drought resistance gene (*DRG*) knockout mutant line. The T-DNA insertion site is marked with an *arrow*. Numbers are given from the initiation codon. F, R1, and R2 indicate *DRG*-specific primers. *B* - The insertion of the T-DNA into the *DRG* in Salk\_022729. The genomic DNA was purified from *Arabidopsis thaliana* non-annotated RNA (AtNAR01, AtNAR15, and AtNAR27 plants and amplified using F, R1, and LBb1 primers (the left border of the T-DNA).

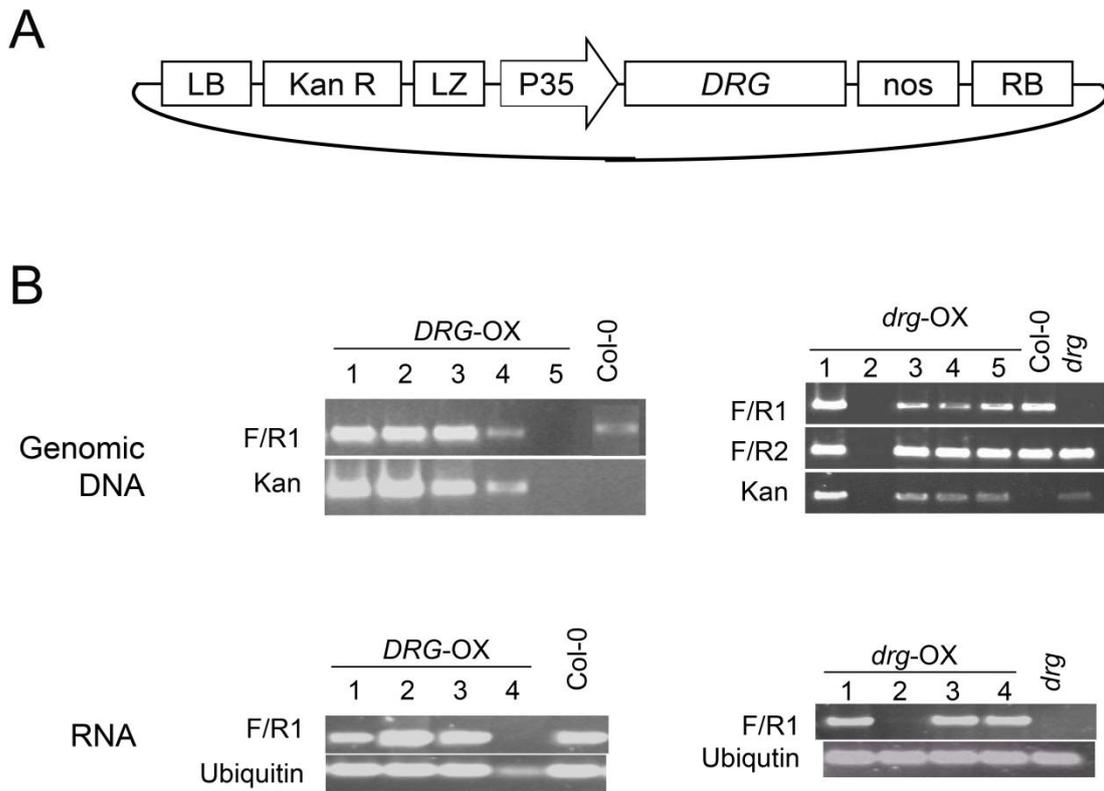


Fig. 3 Suppl. *A* - The map of the pPZP211-EX-drought resistance gene (*DRG*) used to transform *Arabidopsis*. The *DRG* coding region was inserted under the control of the pCaMV in the pPZ211-EX vector. *B* - The integration and expression of the *DRG* in transgenic plants. The genomic DNA was purified from *DRG*-OX and *drg*-OX transgenic plants and PCR amplified using F and R1 or R2 *DRG*-specific primers shown in Fig. 2 Suppl. A kanamycin gene (Kan)-specific primer was used to detect the integration of the T-DNA containing the kanamycin resistance gene as selection marker. The total RNAs purified from the *DRG*-OX and *drg*-OX transgenic plants were reverse-transcribed to cDNAs and PCR amplified with F and R1 primers. A ubiquitin primer was used as internal control.