

## **APPENDIX FIGURES AND TABLE**

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**Appendix Figure S2. Expression of CASPL family genes in response to *Pst* DC3000 (*AvrRpm1*).**

**Appendix Figure S3. Genetic characterization of *caspl* mutant plants.**

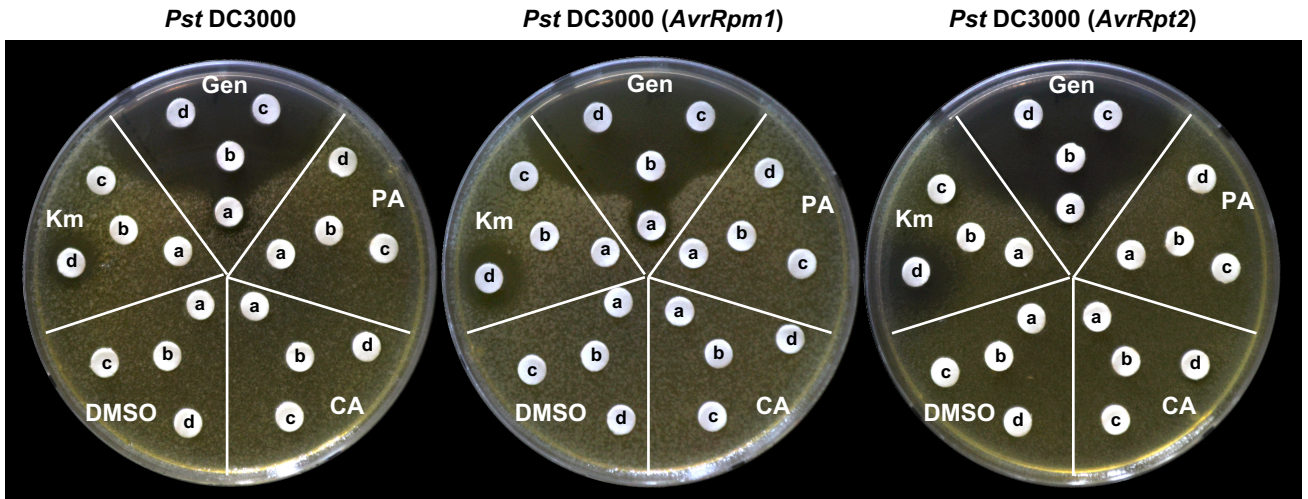
**Appendix Figure S4. Phloroglucinol staining of *caspl* mutant leaves.**

**Appendix Figure S5. Phylogenetic tree of *Arabidopsis* CASPL family members.**

**Appendix Figure S6. *Pst* DC3000 (*AvrRpm1*) growth after surface-inoculation.**

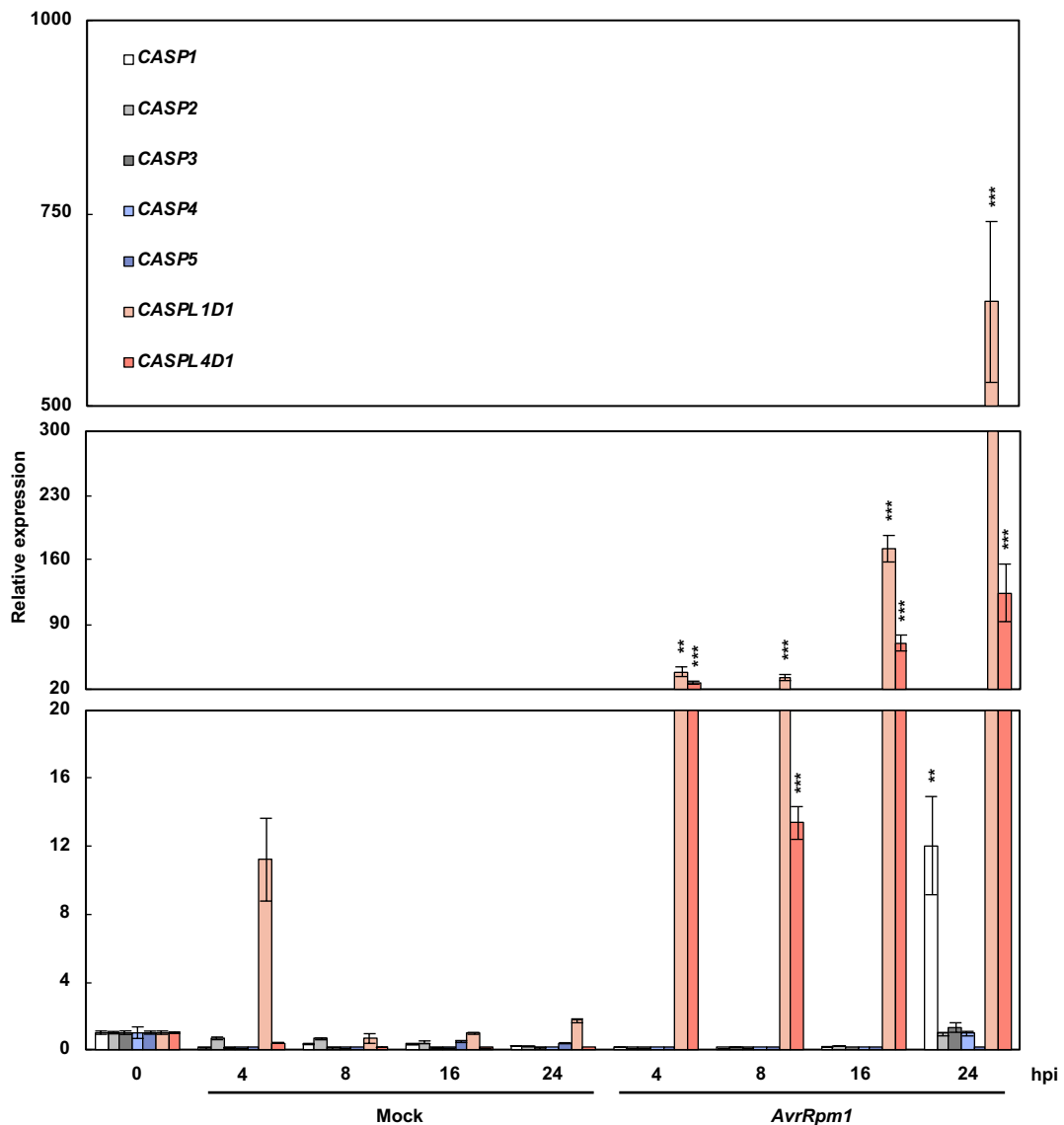
**Appendix Figure S7. Functional complementation of *caspl4d1-1* mutant with *pCASPL4D1::CASPL4D1-mCherry* transgene.**

**Appendix Table S1. Primers used in this study.**



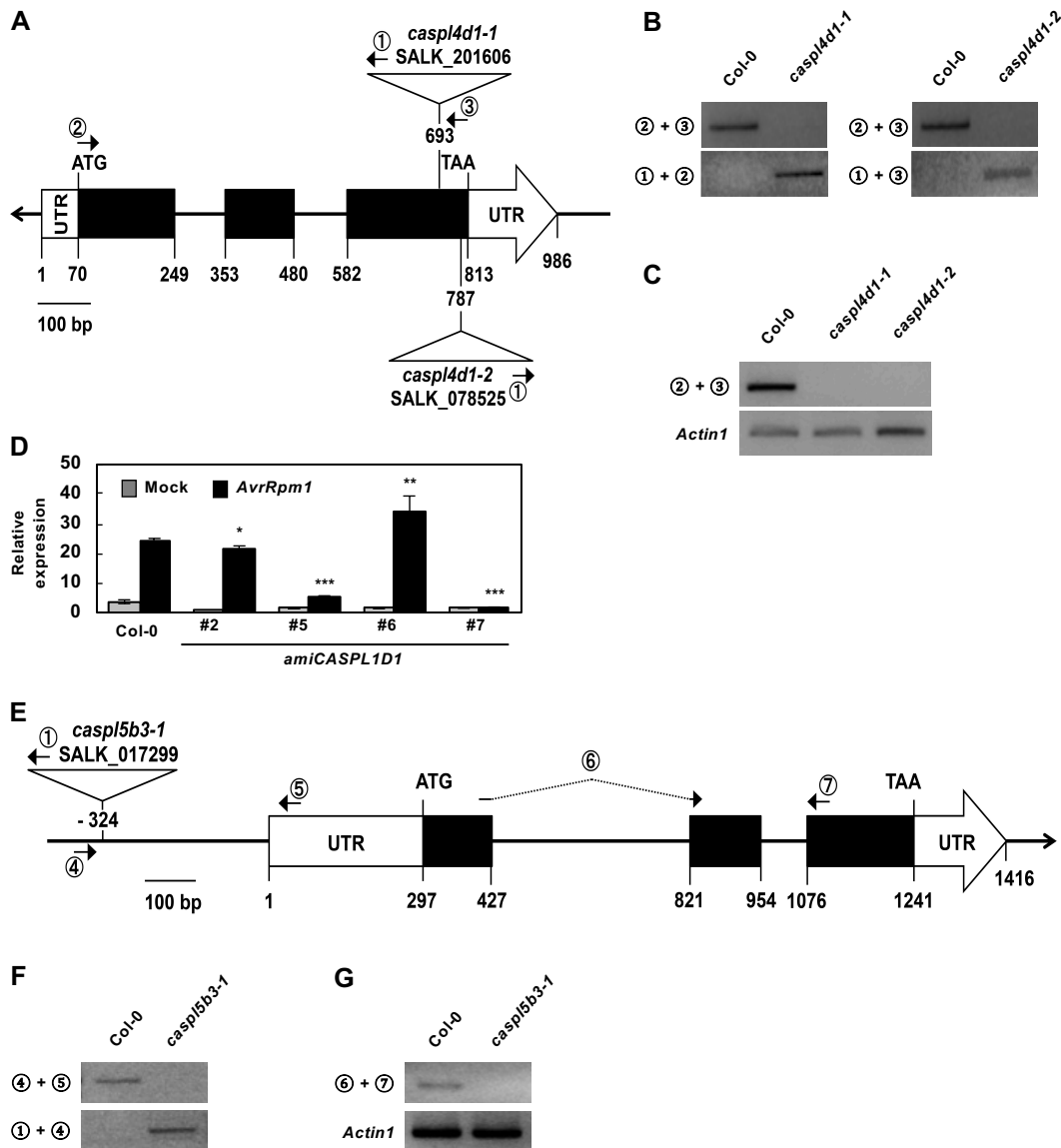
### Appendix Figure S1. Coniferyl alcohol and piperonylic acid sensitivity tests.

King's B agar plates were first covered with *Pst* DC3000, *Pst* DC3000 (*AvrRpm1*), and *Pst* DC3000 (*AvrRpt2*). Paper discs impregnated with DMSO, coniferyl alcohol (CA), piperonylic acid (PA), or antibiotic controls, gentamicin (Gen) and kanamycin (Km), were then placed on the agar surface. Bacterial sensitivity was tested with concentrations (a, 1X) used in bacterial culture media and in plants and 10-fold increasing concentrations (b, 10X; c, 10<sup>2</sup>X; d, 10<sup>3</sup>X). Bacterial growth around each disc was assessed after 2 days of incubation. The clear area indicates bacterial growth inhibition. 1X concentrations are as follows: DMSO, 0.1%; CA, 50  $\mu$ M; PA, 50  $\mu$ M; Gen, 10  $\mu$ g/ml; Km 50  $\mu$ g/ml.



### Appendix Figure S2. Expression of CASPL family genes in response to *Pst* DC3000 (*AvrRpm1*).

qRT-PCR analysis of *CASP* and *CASPL* genes in *Pst* DC3000 (*AvrRpm1*)-infected wild-type plants. hpi, hours post-inoculation. Asterisks indicate significant differences from the respective mock control (*t* test; \*\* $P < 0.01$ ; \*\*\* $P < 0.001$ ).



### Appendix Figure S3. Genetic characterization of *caspl* mutant plants.

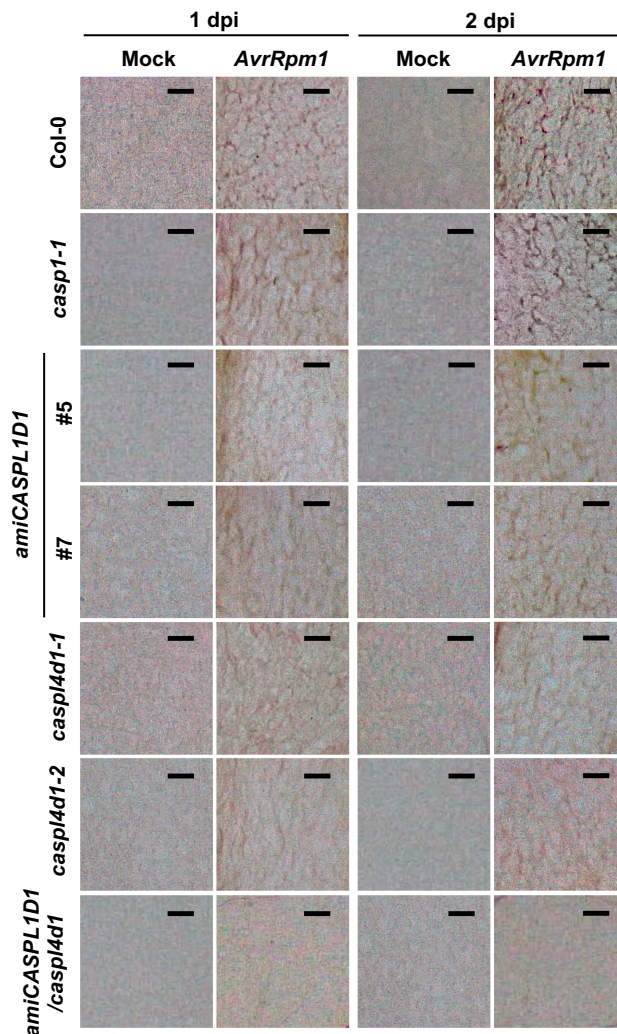
A, E Genomic structures of *CASPL4D1* (A) and *CASPL5B3* (E) genes. Triangles and arrows indicate the positions of the T-DNA insertions and primers used for PCR, respectively. Genomic DNA sequences are represented by exons (black boxes), introns (lines), and UTRs (white boxes). Numbers refer to nucleotides of each gene.

B, F Genotyping of *CASPL4D1* (B) and *CASPL5B3* (F) genes. PCR using primers indicated in (A and E) verified homozygous T-DNA insertions.

C, G RT-PCR analysis of *CASPL4D1* (C) and *CASPL5B3* (G) expression. *Actin1* was used as a control.

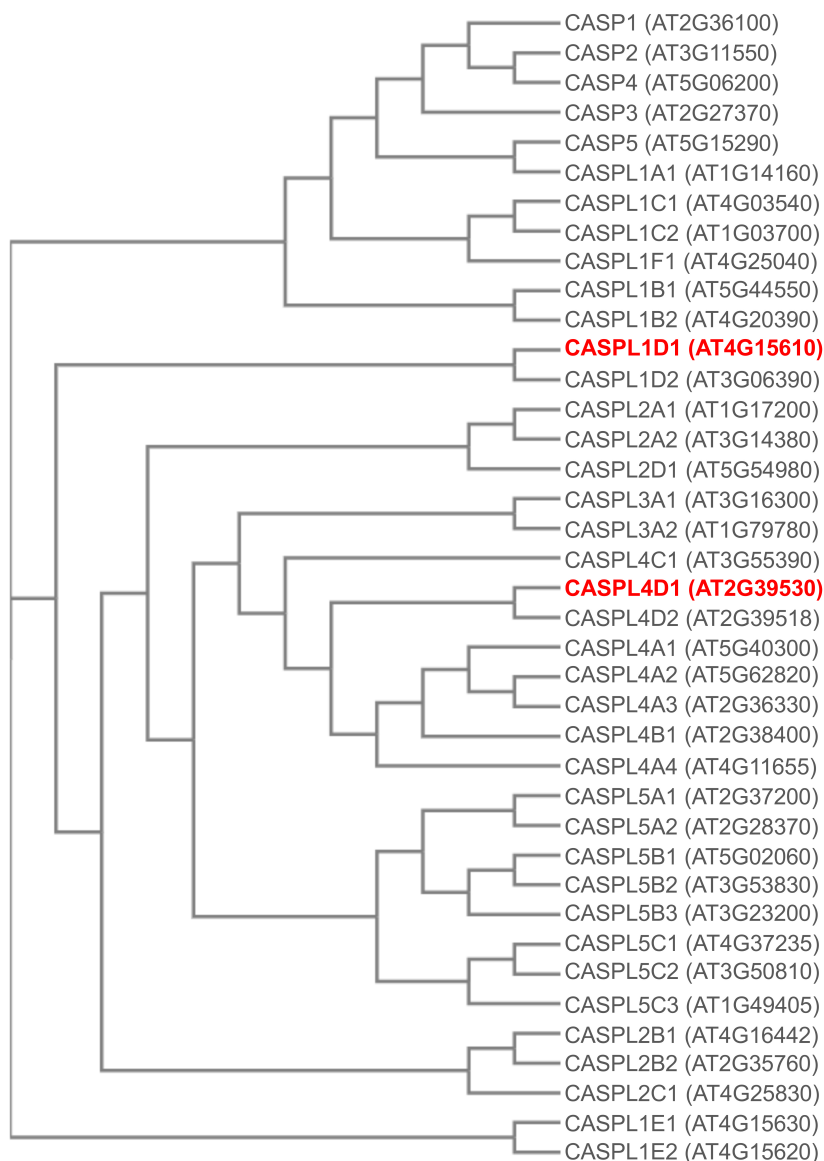
D qRT-PCR analysis of *CASPL1D1* expression in mock- or *Pst* DC3000 (*AvrRpm1*)-inoculated *amiCASPL1D1* lines. Data are means  $\pm$  SD ( $n = 3$ ). Asterisks indicate significant differences from the respective Col-0 ( $t$  test; \* $P < 0.05$ ; \*\* $P < 0.01$ ; \*\*\* $P < 0.001$ ).





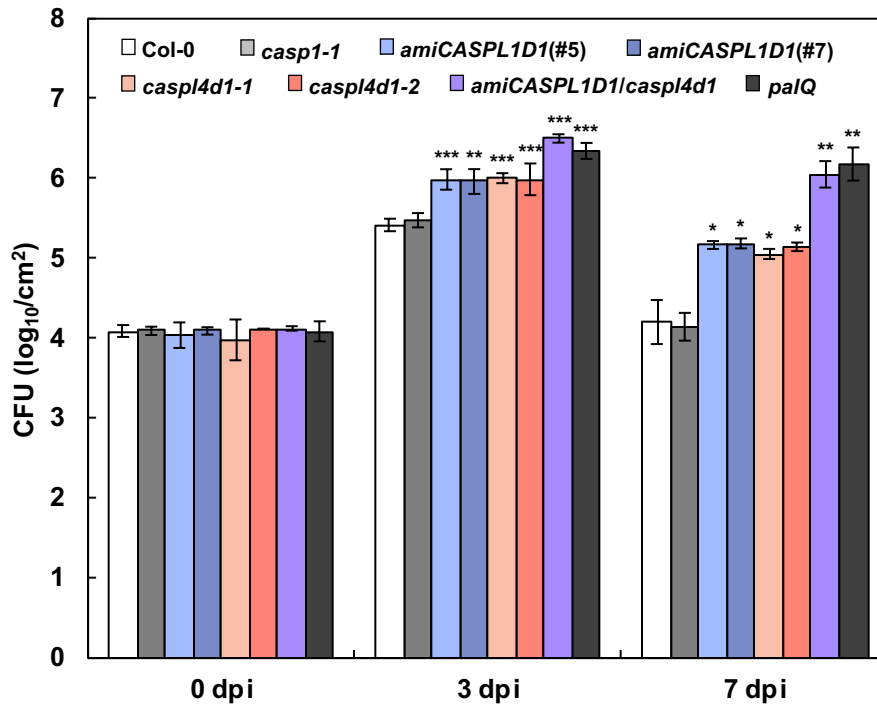
#### Appendix Figure S4. Phloroglucinol staining of *casp1* mutant leaves.

Wild-type and *casp1* mutant leaves were infiltrated with 10 mM MgCl<sub>2</sub> (Mock) or *Pst* DC3000 (*AvrRpm1*) at 10<sup>8</sup> cfu/ml. *AvrRpm1*, *Pst* DC3000 (*AvrRpm1*); dpi, days post-inoculation. Bars, 50 μm.



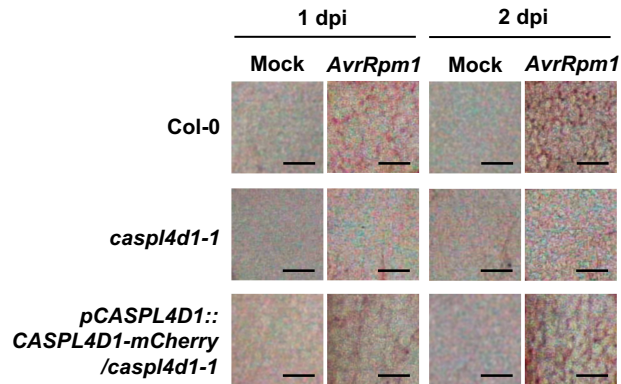
**Appendix Figure S5. Phylogenetic tree of *Arabidopsis* CASPL family members.**

Multiple sequence alignment was performed using the ClustalW program ([www.ebi.ac.uk/Tools/msa/clustalo/](http://www.ebi.ac.uk/Tools/msa/clustalo/)) and the tree was constructed using the neighbor-joining method.



**Appendix Figure S6. *Pst* DC3000 (*AvrRpm1*) growth after surface-inoculation.**

Wild-type, *casp1*, and *palQ* plants were spray-inoculated with *Pst* DC3000 (*AvrRpm1*) at  $10^9$  cfu/ml. Data are means  $\pm$  SD ( $n = 3$ ). Asterisks indicate significant differences from the respective Col-0 (*t* test; \* $P < 0.05$ ; \*\* $P < 0.01$ ; \*\*\* $P < 0.001$ ).



**Appendix Figure S7. Functional complementation of *caspl4d1-1* mutant with *pCASPL4D1::CASPL4D1-mCherry* transgene.**

Phloroglucinol staining of wild-type, *caspl4d1-1*, and *caspl4d1-1 pCASPL4D1::CASPL4D1-mCherry* leaves infiltrated with *Pst* DC3000 (*AvrRpm1*) at  $10^8$  cfu/ml. Bars, 100  $\mu$ m.

Appendix Table S1. Primers used in this study.

| Gene                    | Locus     | Primer   | Experiment               |
|-------------------------|-----------|--|--------------------------|
| <i>CASP1</i>            | AT2G36100 | For: TCTTTTAAACCCCAATTGCAAGAGA<br>Rev: CGACTACGGCTACGGCTATC  | qRT-PCR                  |
| <i>CASP2</i>            | AT3G11550 | For: GCTTCCTCTTTCAAAGCAACACA<br>Rev: TCTCGTCGCTTGTTCCCATC  | qRT-PCR                  |
| <i>CASP3</i>            | AT2G27370 | For: GCTCCTCCTTTGAATCTTTTCCA<br>Rev: CTCTTCCGTTGTCGCCATCT  | qRT-PCR                  |
| <i>CASP4</i>            | AT5G06200 | For: GAAGAGTGACTCAATCGCCGT<br>Rev: GCAGCTAAGGCAGCTACAATG   | qRT-PCR                  |
| <i>CASP5</i>            | AT5G15290 | For: TCCTTCCCAAGAAACCTAGCAA<br>Rev: GACCCAACATTGCCACATCA   | qRT-PCR                  |
| <i>CASPL1D1</i>         | AT4G15610 | For: CCAACTCACGGCTCTTATAT<br>Rev: AGATATGACAGATTTTGCCCC  | qRT-PCR                  |
| <i>CASPL4D1</i>         | AT2G39530 | For: CGATGTCTATGCTTATAGATACATGC<br>Rev: AGAGAGACGAATGCCAAGAGA  | qRT-PCR                  |
|                         |           | For: ATGGCTCCACCACCTCCGG<br>Rev: TTATGAGACTGGAAGTGGTCGTTTGGAAA   | genotyping<br>and RT-PCR |
| <i>CASPL5B3</i>         | AT3G23200 | For: GTTGTGATTATAGTTTGCG<br>Rev: GAAACTCAGGCGATTATTC   | RT-PCR                   |
|                         |           | For: AGCTTCACTGCTTTCTGCTATC<br>Rev: CGCTAGTGACAATGTCGATGT  | genotyping               |
| <i>Actin1</i>           | AT2G37620 | For: GGCGATGAAGCTCAATCCAAACG<br>Rev: GGTCACGACCAGCAAGATCAAGACG   | RT-PCR and<br>qRT-PCR    |
| <i>miR319a_Bakcbone</i> | AT4G23713 | For: TCACAGGTCGTGATATGATTCAATTAGC<br>Rev: TCAAAGAGAATCAATGATCCAATTTGTCT                                    | cloning                  |
| <i>amiCASPL1D1</i>      | AT4G15610 | For:<br>GGATCCTACAAAGTATATAAGAGCCGAtcacaggtcgtgatatg<br>Rev:<br>CTGCAGAACAAGAATATAAGAGCTGAtcaagagaatcaatga | cloning                  |
| LBb1                    |           | GCGTGGACCGCTTGCTGCAACT   | genotyping               |