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Supplementary Material

Plasmalemma localisation of DOUBLE HYBRID PROLINE-RICH PROTEIN 1 and its function in systemic acquired resistance of *Arabidopsis thaliana*

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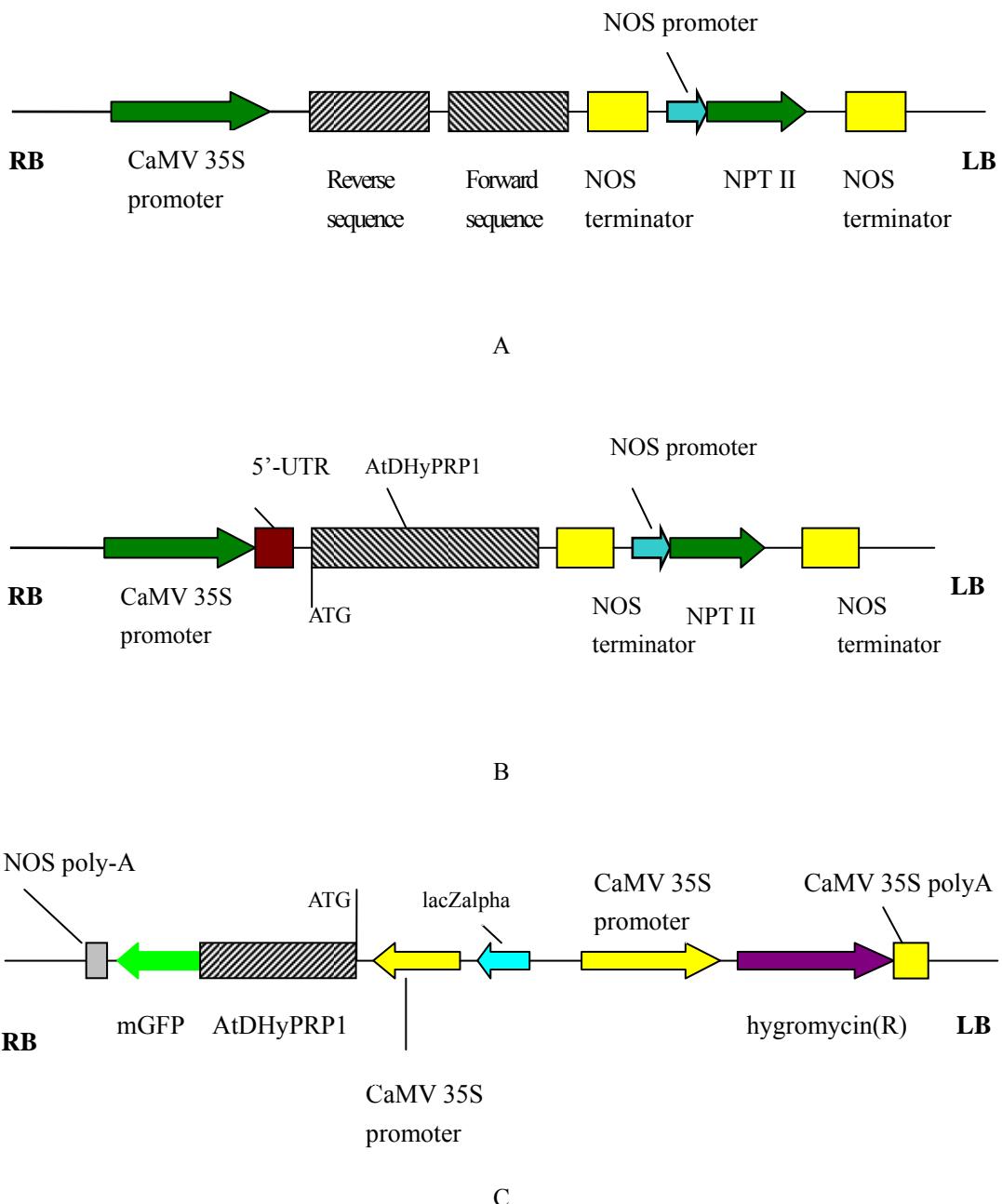


Fig. S1. Construction of OE, RNAi and *GFP* fusion expression vectors of *AtDHyPRP1*. **(A)** Structure of RNAi construct, the vector is pRI101-AN. **(B)** Structure of overexpression, the vector is pRI101-AN. **(C)** Structure of *AtDHyPRP1-GFP* fusion expression, the vector is pCAMBIA1302.

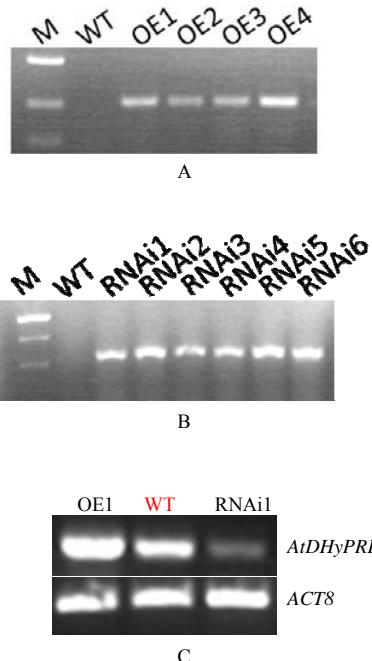


Fig. S2. Identification and expression analysis of *AtDHyPRP1* OE and RNAi lines. **(A)** PCR identification of *AtDHyPRP1* OE lines. M, DL2000 DNA Ladder; WT, wild-type Ws plant; OE1-OE4, *AtDHyPRP1* overexpressing lines. **(B)** PCR identification of *AtDHyPRP1* RNAi lines. M, DL2000 DNA Ladder; WT, wild-type Ws plant; RNAi1-RNAi6, *AtDHyPRP1* RNAi lines. **(C)** RT-PCR analysis of *AtDHyPRP1* in lines with modulated expression of *AtDHyPRP1*. OE1, *AtDHyPRP1* overexpressing line 1; WT, wild-type Ws plant; RNAi1, *AtDHyPRP1* RNAi line 1.

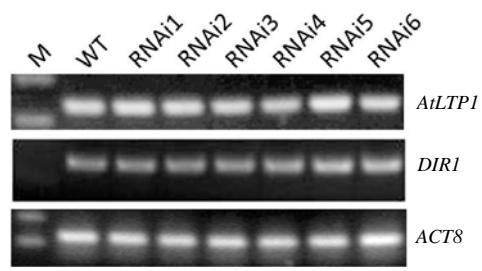
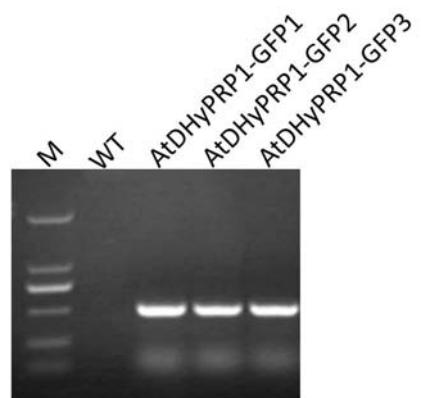


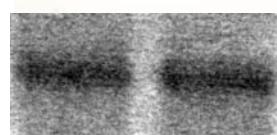
Fig. S3. RT-PCR analyses of *AtLTP1* and *DIR1* in RNAi lines of *AtDHyPRP1*. M, DL2000 DNA Ladder; WT, wild-type Ws plant; RNAi1-RNAi6, *AtDHyPRP1* RNAi lines.



A

HyPRP1-GFP1 WT

← 67 kD



B

Fig. S4. Identification of $35S::AtDHyPRP1-GFP$ transgenic Arabidopsis plants. (A) PCR analysis of $AtDHyPRP1-GFP$ fusion gene. M, DL2000 DNA Ladder; WT, wild-type Ws plant; AtDHyPRP1-GFP1 – AtDHyPRP1-GFP3, $35S::AtDHyPRP1-GFP$ transgenic Arabidopsis plants. (B) Western blotting analysis of the integrity of AtDHyPRP1-GFP fusion protein using GFP-specific antibody. AtDHyPRP1-GFP1, $35S::AtDHyPRP1-GFP$ transgenic Arabidopsis line 1; WT, wild-type Ws plant. The arrow indicates the AtDHyPRP1-GFP fusion protein. At bottom is an identically loaded gel stained with Coomassie blue.

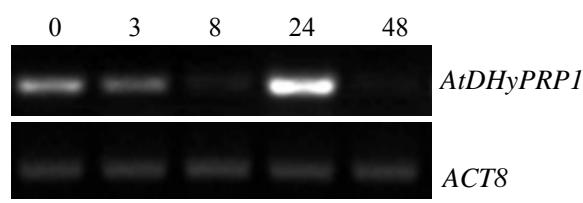
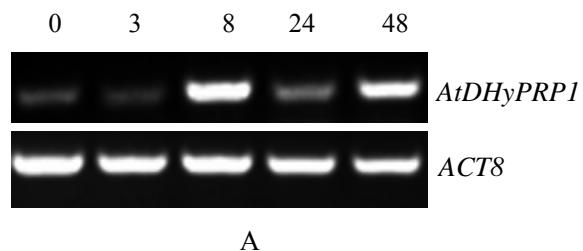


Fig. S5. RT-PCR analyses showing the influence of infection with avirulent *Pst avrRPM1* (**A**) and virulent *Pst* DC3000 (**B**) on expression of *AtDHyPRP1* at different time points after inoculation.

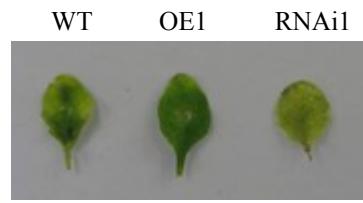


Fig. S6. Response of WT, *AtDHyPRP1* OE and *AtDHyPRP1* RNAi plants to *B. cinerea*. WT, wild-type Ws plant; OE1, *AtDHyPRP1* overexpressing line 1; RNAi1, *AtDHyPRP1* RNAi line 1. 10 µL conidial suspension with a concentration of 1×10^5 conidia.mL⁻¹ was pipetted onto the surface of detached rosette leaves of 3-week-old *Arabidopsis* plants and the leaves were checked after 4 days.



Fig. S7. Response of 3-week-old WT, *AtDHyPRP1* OE and RNAi lines to *Pst* DC3000. Four days after spraying with bacterial suspension of *Pst* DC3000 with $OD_{600}=0.01$. RNAi1, *AtDHyPRP1* RNAi line 1; WT, wild-type Ws plant; OE1, *AtDHyPRP1* overexpressing line 1.