Supplementary Material

Differential suppression of *Nicotiana benthamiana* innate immune responses by transiently expressed *Pseudomonas syringae* type III effectors

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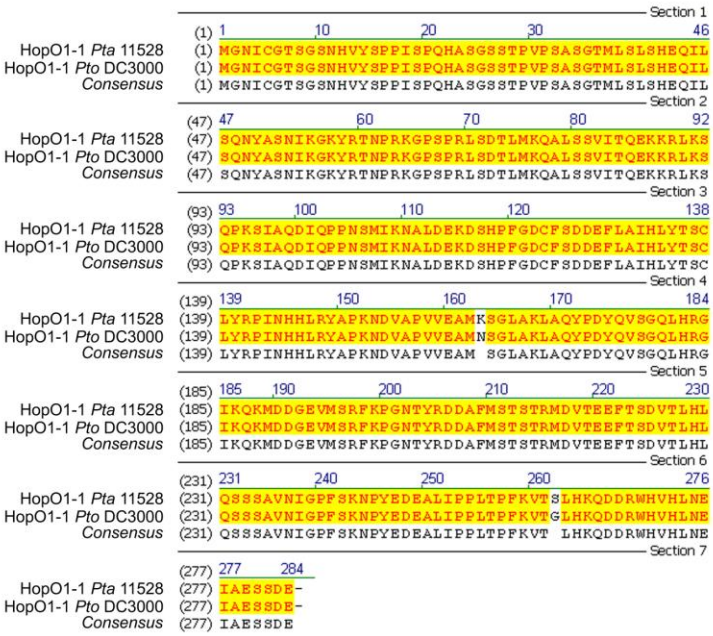

Figure S1. Sequence alignment of HopO1-1$_{Pta11528}$.

Amino acid alignment of HopO1-1$_{Pta11528}$ and HopO1-1$_{PtoDC3000}$. Identical residues are labelled in yellow.

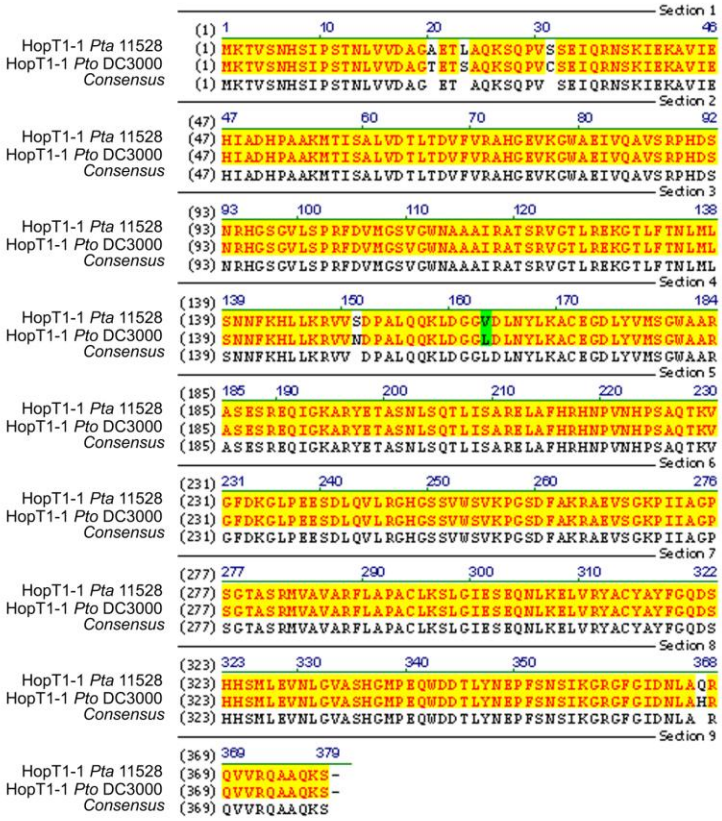

Figure S2. Sequence alignment of HopT1-1$_{Pta11528}$.

Amino acid alignment of HopT1-1$_{Pta11528}$ and HopT1-1$_{PtoDC3000}$. Identical residues are labelled in yellow and conservative substitutions in green.

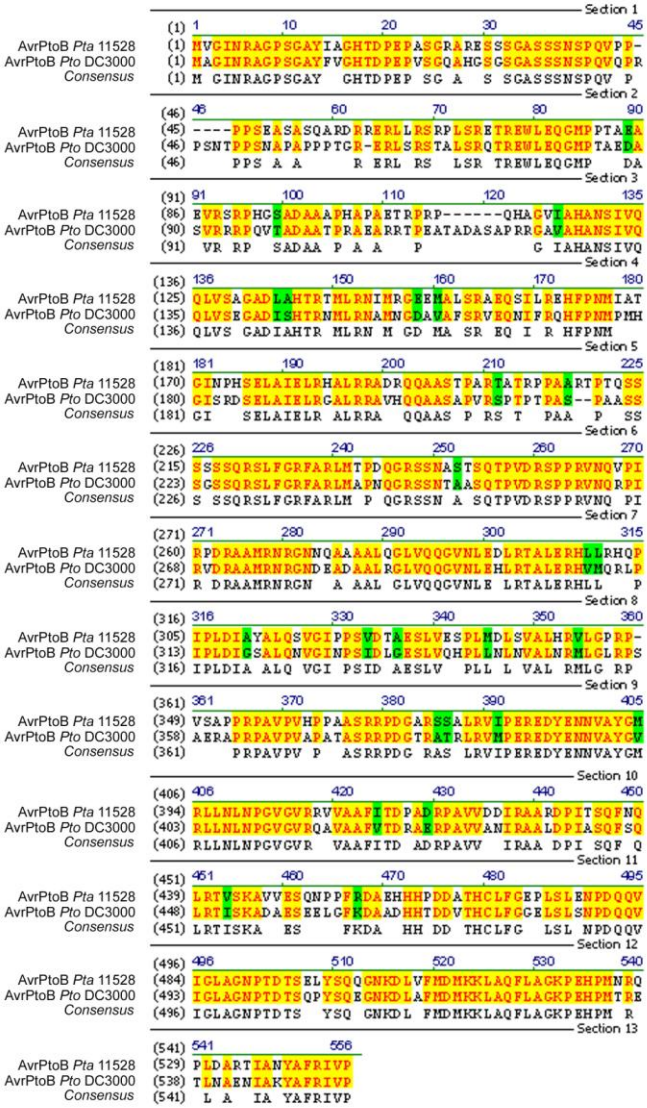

Figure S3. Sequence alignment of AvrPtoB$_{Pta11528}$.

Amino acid alignment of AvrPtoB$_{Pta11528}$ and AvrPtoB$_{PtoDC3000}$. Identical residues are labelled in yellow and conservative substitutions in green.

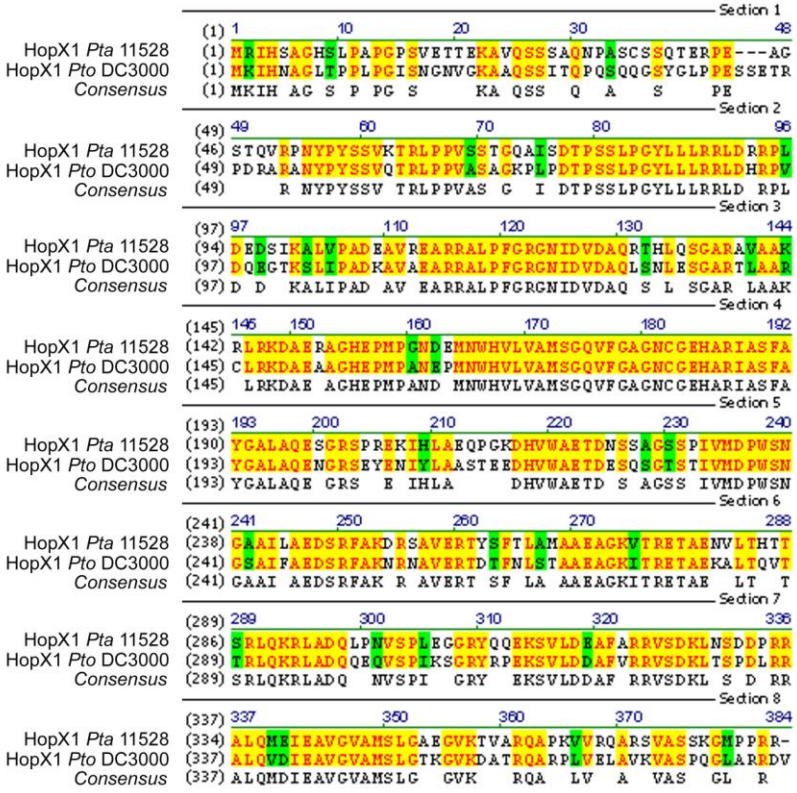

Figure S4. Sequence alignment of HopX1$_{Pta11528}$.

Amino acid alignment of HopX1$_{Pta11528}$ and HopX1$_{PtoDC3000}$. Identical residues are labelled in yellow and conservative substitutions in green.

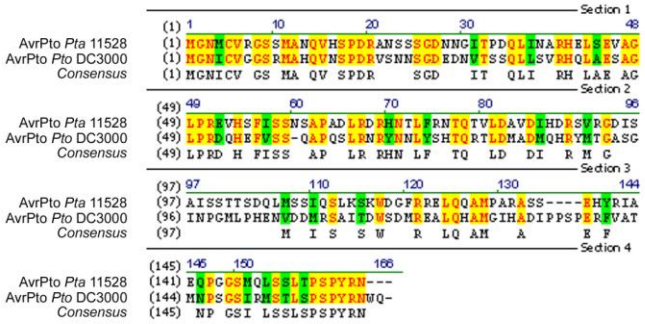

Figure S5. Sequence alignment of AvrPto$_{Pta11528}$.

Amino acid alignment of AvrPto$_{Pta11528}$ and AvrPto$_{Pto\text{DC}3000}$. Identical residues are labelled in yellow and conservative substitutions in green.

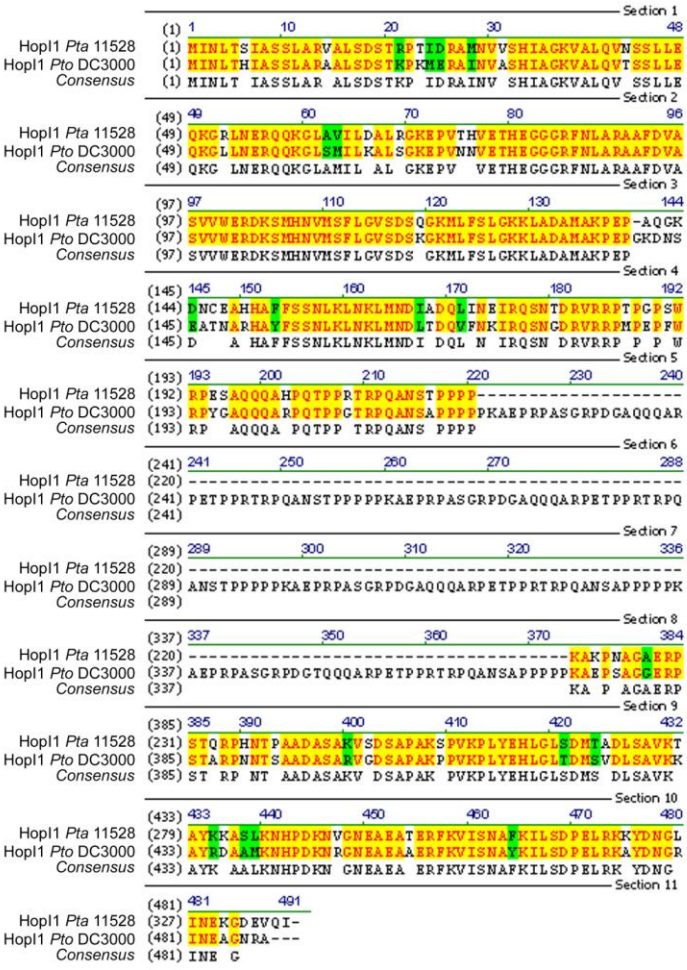

Figure S6. Sequence alignment of HopI1$_{Pta11528}$.

Amino acid alignment of HopI1$_{Pta11528}$ and HopI1$_{PtoDC3000}$. Identical residues are labelled in yellow and conservative substitutions in green.

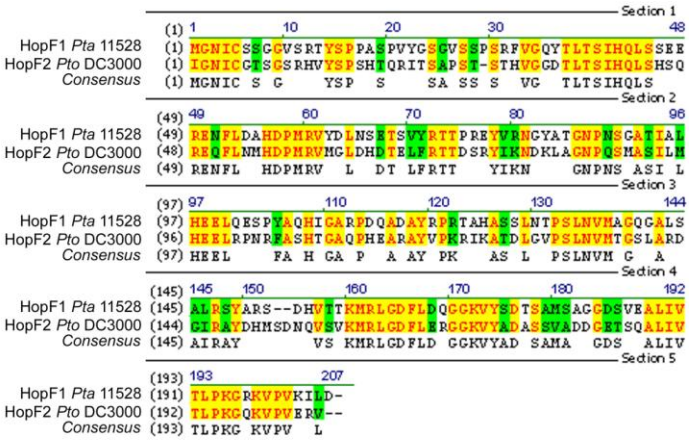

Figure S7. Sequence alignment of HopF1*Pta*11528.

Amino acid alignment of HopF1*Pta*11528 and HopF2*Pto*DC3000. Identical residues are labelled in yellow and conservative substitutions in green.

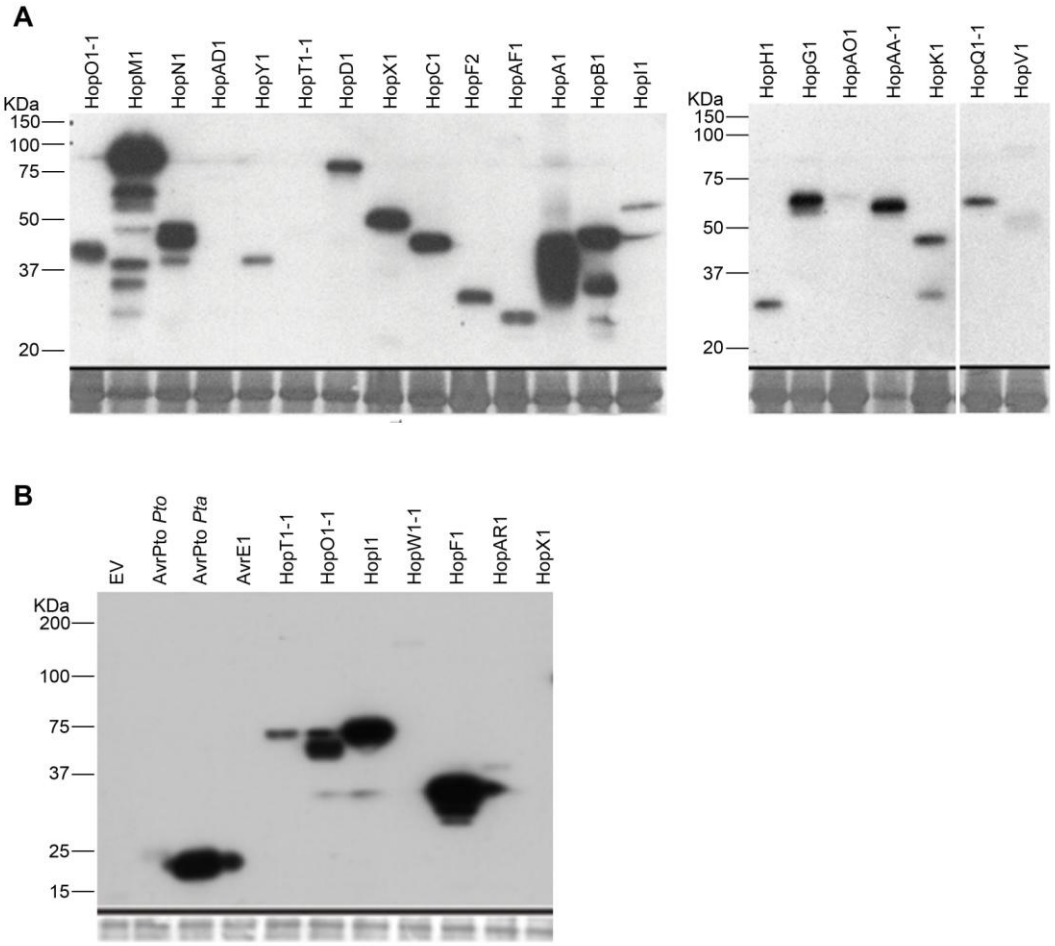

Figure S8. Accumulation of *Pto* DC3000 and *Pta* 11528 effector proteins in *N. benthamiana*.

(A) Western blot showing accumulation of *Pto* DC3000 effector proteins in leaf tissue after *A. tumefaciens* mediated transient expression in *N. benthamiana* for two days. A Coomassie brilliant blue loading control is shown in the lower panel.

(B) Western blot showing accumulation of all *Pta* 11528 effector proteins in leaf tissue after *A. tumefaciens* mediated transient expression in *N. benthamiana* for two days. A Coomassie brilliant blue loading control is shown in the lower panel.

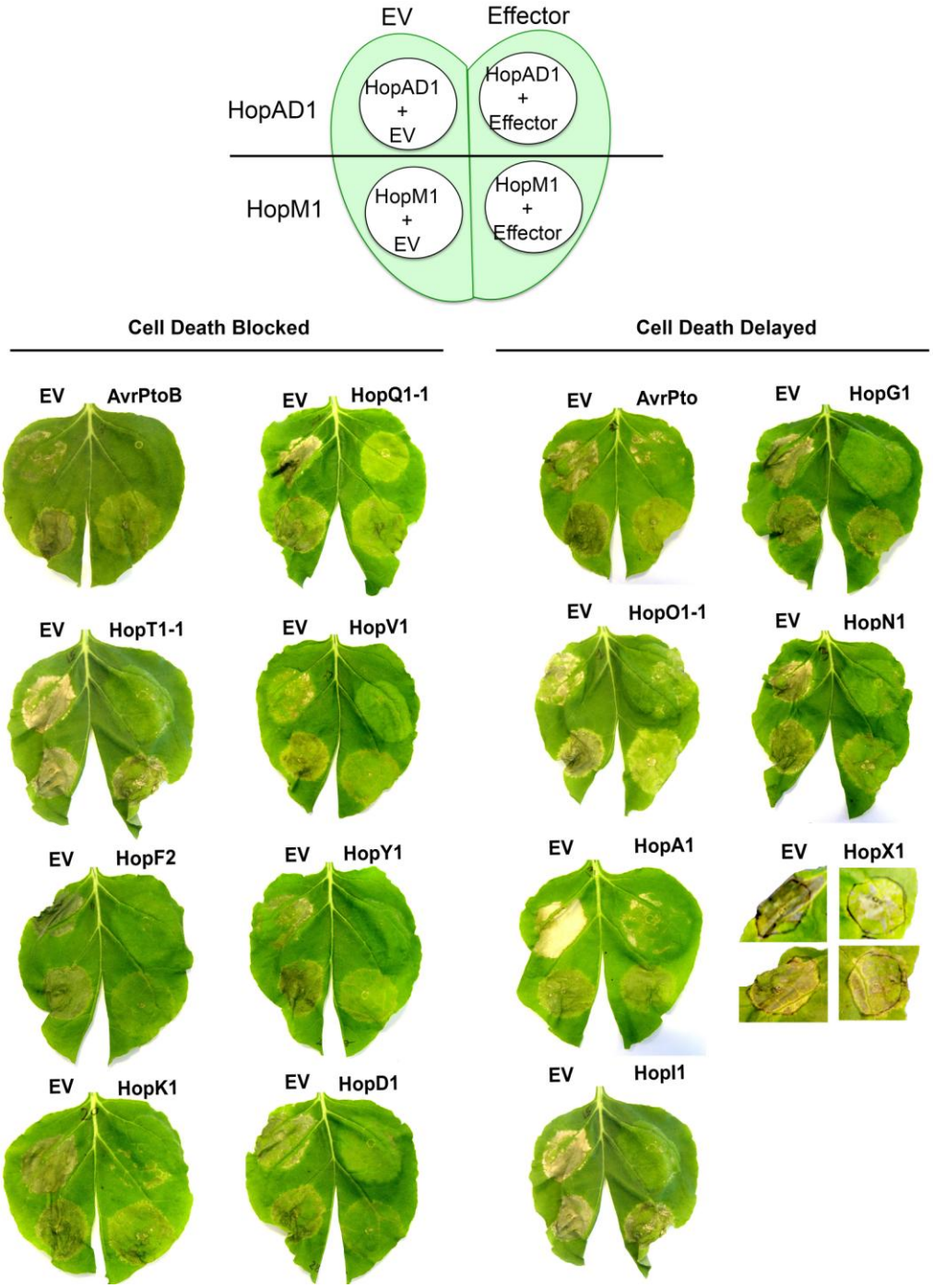

Figure S9. Most *Pto* DC3000 effectors can interfere with *hopM1*$_{PtoDC3000}$-induced cell death.

Suppression of *hopM1*$_{PtoDC3000}$ and *hopAD1*$_{PtoDC3000}$ induced cell death by *Pto* DC3000 effectors. The effector *hopM1*$_{PtoDC3000}$ or *hopAD1*$_{PtoDC3000}$ was co-expressed in *N. benthamiana* leaves with each effector in the *Pto* DC3000 repertoire, or an *EV* control, as depicted in the upper schematic diagram. Each of the two *A. tumefaciens* strains containing the respective effector gene or an EV control were prepared at OD_{600}=0.5 then mixed in equal volumes. Cell death induced by the effectors was scored 6 days after infiltration. Similar results were obtained in two independent experiments.

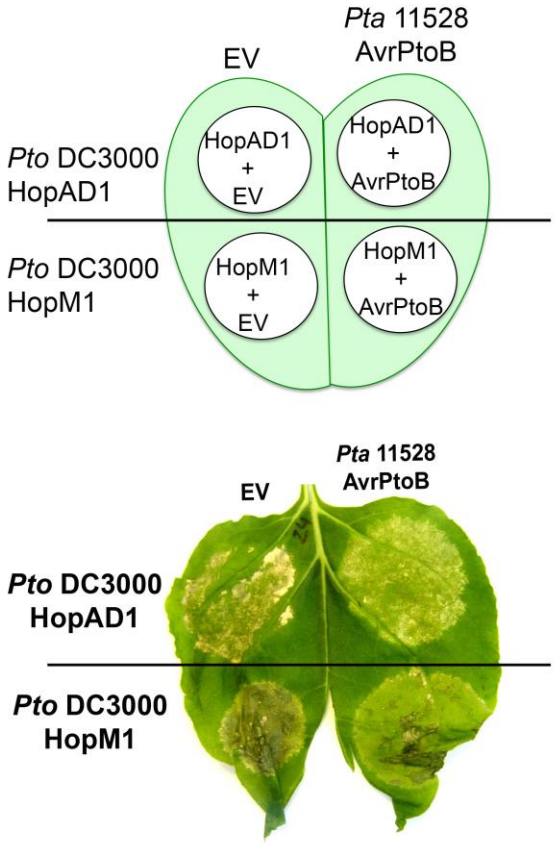

Figure S10. *Pta* 11528 AvrPtoB can interfere with *hopAD1*$_{PtoDC3000}$ or *hopM1*$_{PtoDC3000}$-induced cell death.

Suppression of *hopM1*$_{PtoDC3000}$ and *hopAD1*$_{PtoDC3000}$ induced cell death by the *Pta* 11528 effector AvrPtoB. The effector *hopM1*$_{PtoDC3000}$ or *hopAD1*$_{PtoDC3000}$ was co-expressed in *N. benthamiana* leaves with *avrPtoB*$_{Pta11528}$ or an *EV* control, as depicted in the upper schematic diagram. Each of the two *A. tumefaciens* strains containing the respective effector gene or an EV control were prepared at OD_{600}=0.5 then mixed in equal volumes. Cell death induced by the effectors was scored 6 days after infiltration. Similar results were obtained in two independent experiments.

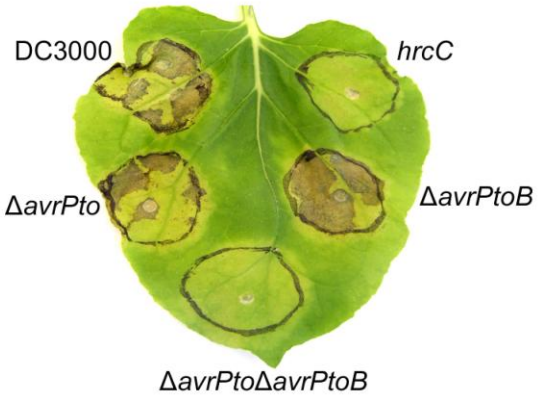

Figure S11. *Pto* DC3000 effectors cannot collectively suppress the induction of the hypersensitive response (HR) triggered upon recognition of AvrPto$_{PtoDC3000}$ and/or AvrPtoB$_{PtoDC3000}$ in transgenic *N. benthamiana* plants expressing the tomato *Pto* and *Prf* genes (*N. benthamiana* R411A).

Transgenic *N. benthamiana* plants were infiltrated with a high dose ($5x10^7$ cfu/ml) of *Pto* DC3000 (DC3000), *Pto* DC3000 *hrcC* (*hrcC*), *Pto* DC3000Δ*avrPto* (Δ*avrPto*), *Pto* DC3000Δ*avrPtoB* (Δ*avrPtoB*) and *Pto* DC3000Δ*avrPto*Δ*avrPtoB* (Δ*avrPto* Δ*avrPtoB*). The HR was visible 24-48 h after infiltration, and photographed at 3 days post infiltration. Similar results were obtained in two independent experiments.