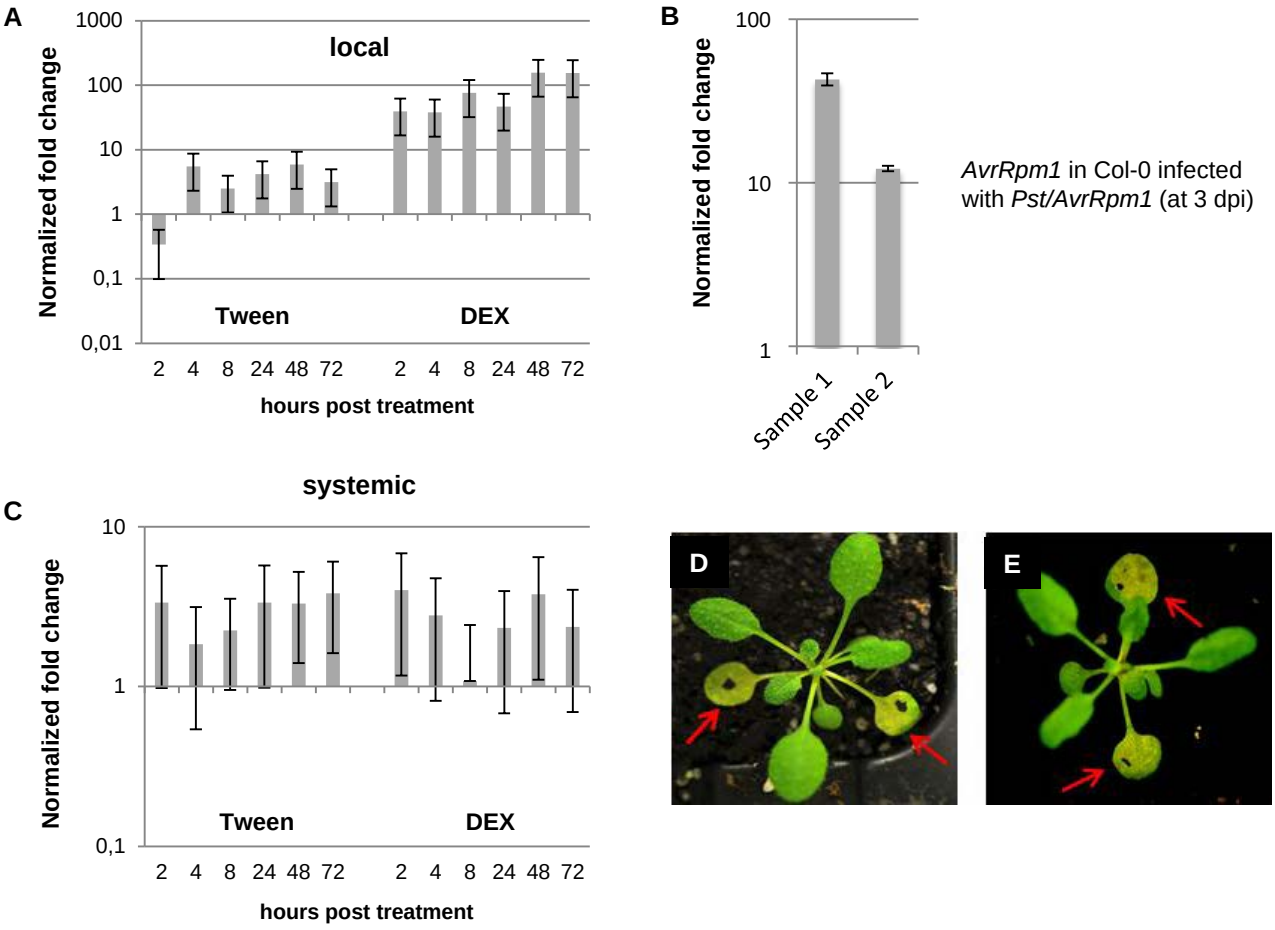
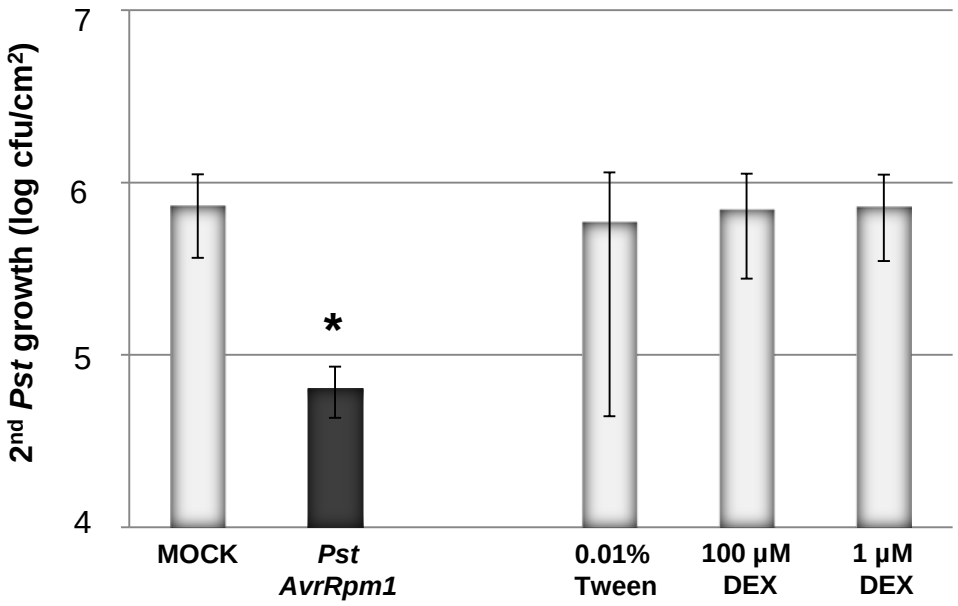
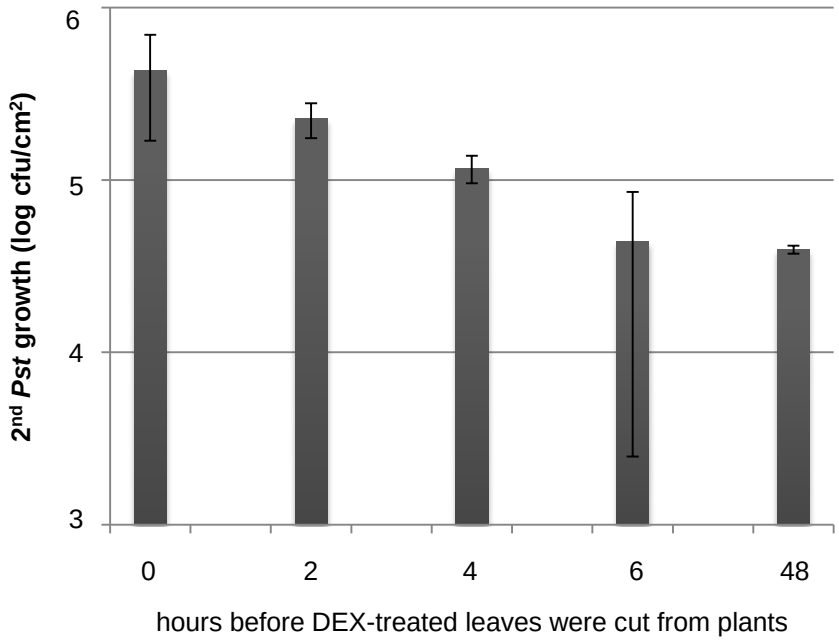


Supplemental Figure S1 *AvrRpm1-HA* transcript accumulation in infected Col-0 plants and in *eds1-2 pDEX:AvrRpm1-HA* plants. The *AvrRpm1-HA* transcript accumulation was normalized to *TUBULIN* in Col-0 plants 3 days after infection (dpi) with 10^6 colony forming units (cfu)/mL of *Pst/AvrRpm1* (B; samples 1 and 2 stem from two biologically independent experiments) and in *eds1-2 pDEX:AvrRpm1-HA* plants (A/C) treated with 0.01% Tween-20 (Tween) or 1µM dexamethasone (DEX). The transcript accumulation in the infected Col-0 plants is shown relative to that in untreated Col-0 *pDEX:AvrRpm1-HA* plants (for comparison to Fig. 2A). The transcript accumulation in the *eds1-2 pDEX:AvrRpm1-HA* plants is shown in treated (A; local) and in systemic untreated leaves (C) relative to the transcript levels in the same leaves of untreated plants. D/E Yellowing symptoms on Col-0 leaves 3 days after infection with 10^6 cfu/mL of *Pst/AvrRpm1* (D) as compared to leaves of Col-0 *DEX:AvrRpm1-HA* plants 3 days after treatment with 1 µM DEX (E). The treated leaves are indicated by red arrows.

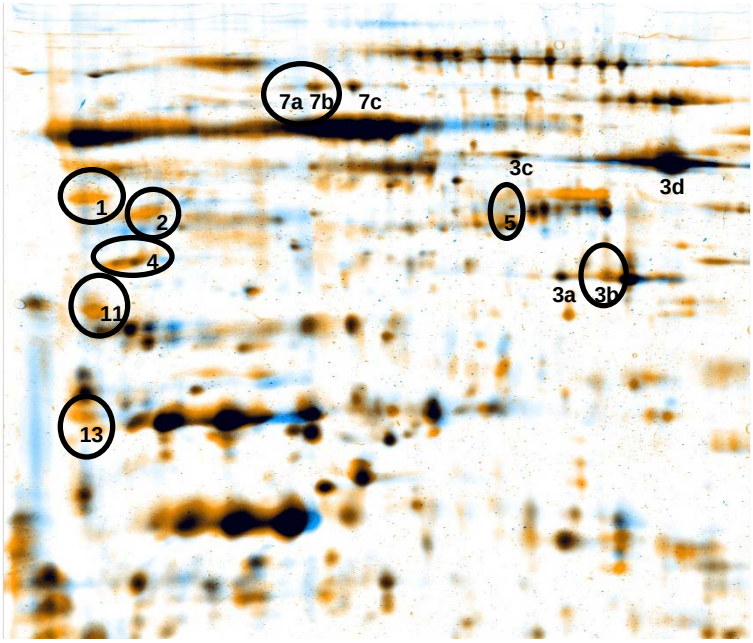


Supplemental Figure S2 DEX does not induce SAR in Col-0 plants. *Pst* titers are shown four days after a secondary infection that was systemic to primary treatments with 10 mM $MgCl_2$ (MOCK, negative control), *Pst/AvrRpm1* (positive control), or 0.01% Tween-20 (Tween), 100 µM DEX, or 1 µM DEX. * indicates a significant difference to the mock-treated control ($P<0.05$, *student's t test*).



Supplemental Figure S3 SAR signals are emitted from the DEX-treated leaves of *pDEX:AvrRpm1-HA* plants between 4 and 6 hours after the DEX treatment. The first two true leaves per plant were untreated (0 hours) or treated with 1µM DEX and cut from the plants at 2, 4, 6, or 48 hours after treatment. In all of the cases, the upper untreated tissue was infected with *Pst* 48 hours after the start of the DEX treatment. The bacterial titers in the infected leaves were measured 3 days after infection.

A



B

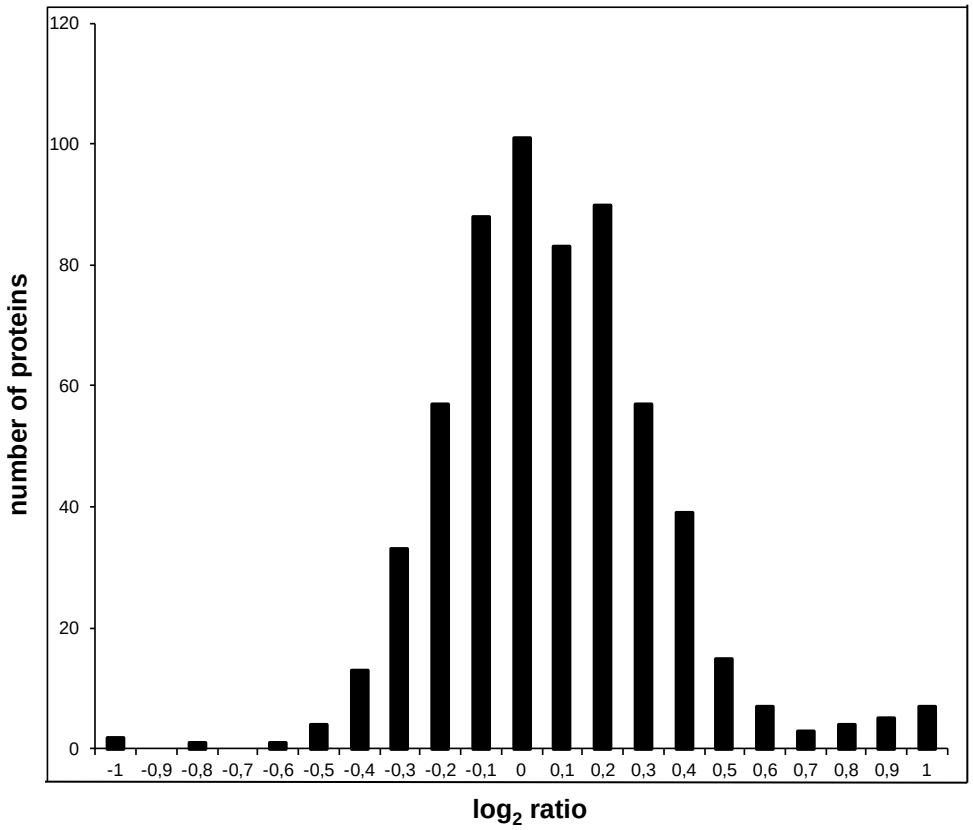
Spot	Protein	Number of times observed	Number of times *EDS1*-dependent
1	AED1	3	3
2	ASPG1/AED2	3	2
3a	AED3	2	0
3b	AED3	2	2
3c	AED3	2	0
3d	AED3	2	0
4	AED4	2	2
5	AED5	2	2
7a	XYL4/AED7	1	1
7b	XYL4/AED7	3	2
7c	XYL4/AED7	3	0
11	PR2	4	4
13	PR5	4	4

Supplemental Figure S4 Summary of 2D gel analyses of apoplast-enriched extracts from *AvrRpm1-HA*-expressing plants. (A) Overlay of the 2D gels shown in Figure 3 with the proteins in the extracts from wt plants depicted in orange and the proteins in the extracts from *eds1-2* mutant plants depicted in blue. Spots containing APOPLASTIC, *EDS1*-DEPENDENT (AED) proteins are circled. Numbers correspond to the numbers of the AED proteins in Table 1 and to numbering in (B). (B) Summary of four biologically independent experiments with the number of times the AED proteins were observed in one or more spots per gel and the number of times their accumulation was dependent on *EDS1.*

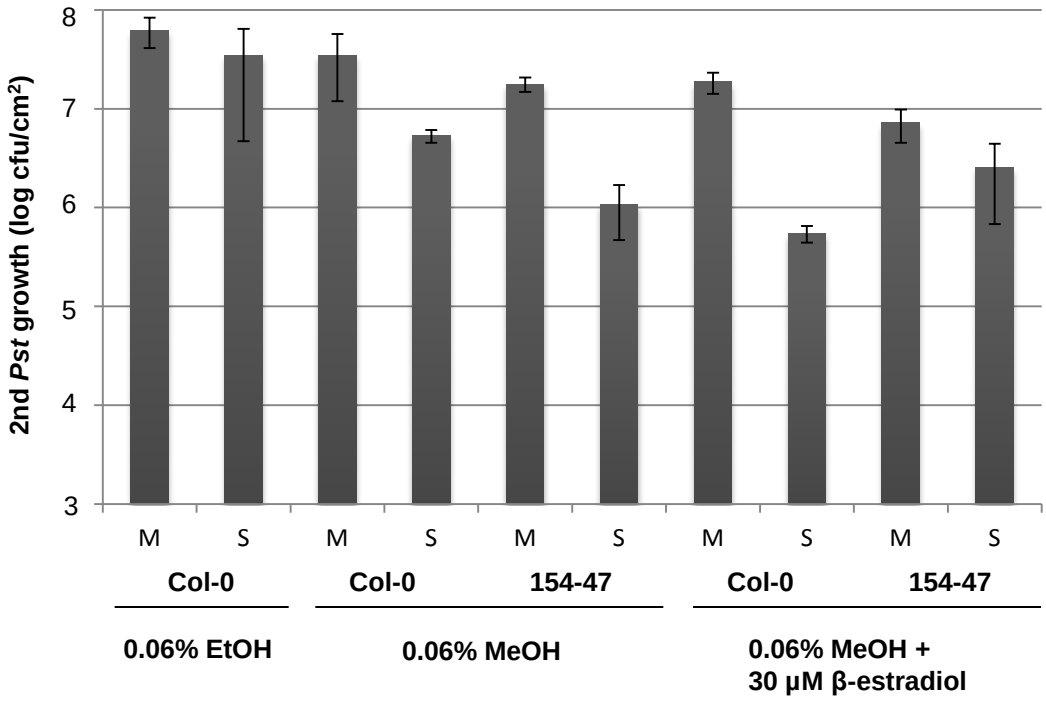
A

Accession UniProt	Protein name	Σ# Light/Heavy counts	Light /Heavy ratio measured	Light/Heavy variability [%]	Light/Heavy theoretical
CAH2_BOVIN	Carbonic anhydrase II	18	2.43	9.8	2,0
ALBU_BOVIN	Serum albumin	38	1.049	9.7	1,0
OVAL_CHICK	Ovalbumin	50	0.242	18.1	0,25

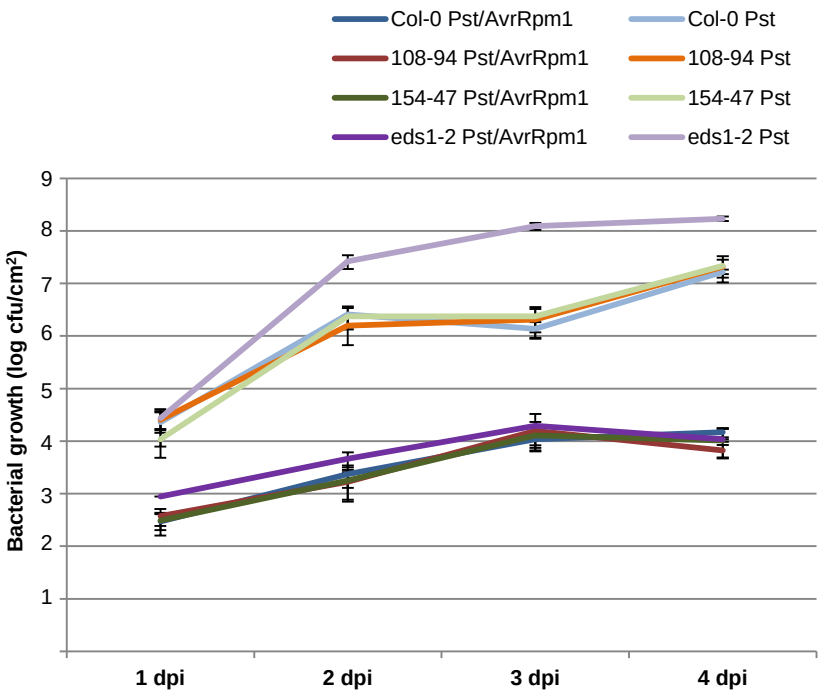
B



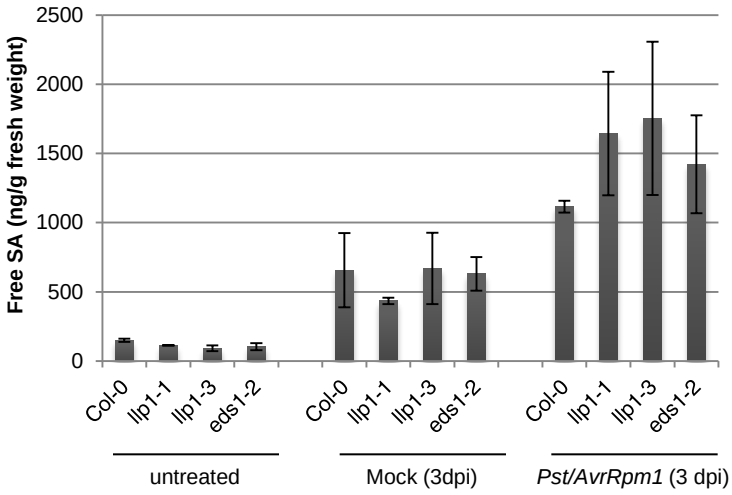
Supplemental Figure S5 ICPL controls (A) Quantitation of the control proteins spiked into the samples at the ratios depicted in the right most column [light/heavy theoretical]. Σ#light/heavy counts, total number of sequence hits corresponding to the protein; light/heavy ratio measured, measured ratio between differentially labeled samples averaged between the three independent repetitions of the experiment; light/heavy variability [%], variability of the measured ratio across the three independent repetitions of the experiment. (B) Distribution of the light/heavy ratios (log_2, x-axis) of the 609 proteins that were quantified in the extracts from the *AvrRpm1-HA*-expressing wt compared with *eds1-2* mutant plants across the three independent repetitions of the experiment.



Supplemental Figure S6 Effects of organic solvents on SAR. SAR experiment using Col-0 plants and the *XVE:AED1-HA* transgenic line 154-47. The plants were sprayed with 0.06% ethanol (EtOH), 0.06% methanol (MeOH), or 30 µM β-estradiol in 0.06% MeOH (each in 0.01% Tween-20). After 24 hours, the first two true leaves per plant were infiltrated with 10 mM $MgCl_2$ (Mock, M) or *Pst/AvrRpm1* (SAR, S). Three days later, the systemic leaves 3 and 4 were infected with *Pst*. *In planta Pst* titers are shown at 4 days post-infection.



Supplemental Figure S7 Pathogen growth in infected leaves of plants over-accumulating AED1-HA. Growth curves of *Pst/AvrRpm1* (dark colours) and *Pst* (light colours) in the wt plants (blue), the *XVE:AED1-HA* lines 108-94 (red/orange) and 154-47 (green), and the *eds1-2* mutant (purple). All of the genotypes were sprayed with 30 μM β-estradiol in 0.01% Tween-20 24 hours prior to the infection. Bacterial titers in the infected leaves were determined at 1, 2, 3, and 4 days post-infection (dpi).



Supplemental Figure S8 Local accumulation of free SA before and after infection of *llp1* mutants. Free SA levels were determined in leaves of 4 to 5-week-old Col-0, *llp1-1*, *llp1-3*, and *eds1-2* plants before and 3 days after infiltration (dpi) with 10 mM $MgCl_2$ (Mock) or *Pst/AvrRpm1* (inoculum density 10^5 cfu/ml).