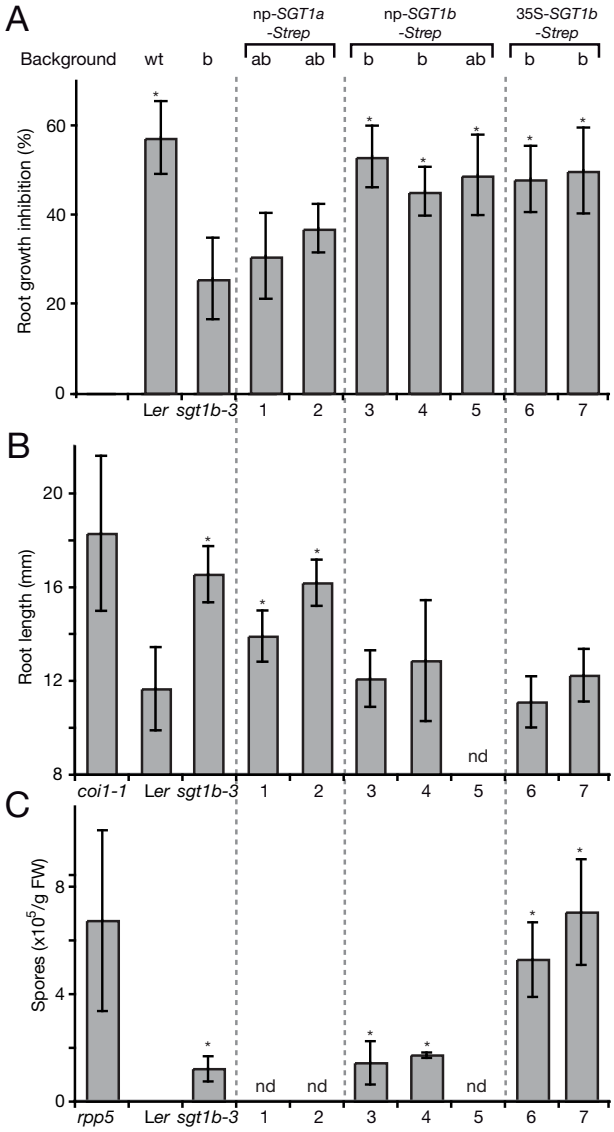
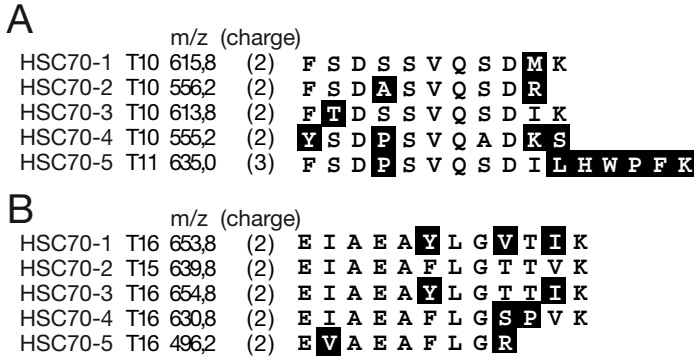



**Supplemental Figure 1 online.** Functionality tests of StrepII-tagged SGT1 proteins in transgenic Arabidopsis described in Figure 1. Plants 1/2, 3/4 and 6/7 indicate independent transgenic lines. Line 5 is derived from a cross between a Ler/Ws-0 hybrid *sgt1b-3/sgt1b-3 sgt1a-1*/SGT1a and plant 4. Background refers to the *SGT1* alleles: wt, wild type *SGT1a* and *SGT1b*; a, homozygous *sgt1a-1*; b, homozygous *sgt1b-3*; ab, double *sgt1a-1 sgt1b-3* homozygotes; nd, not determined.

**(A)** Root growth inhibition on 0,075µM 2-4D. *, statistically significant differences for values compared with L*er sgt1b-3* mutant as determined by student's *t*-test (p<0,001).

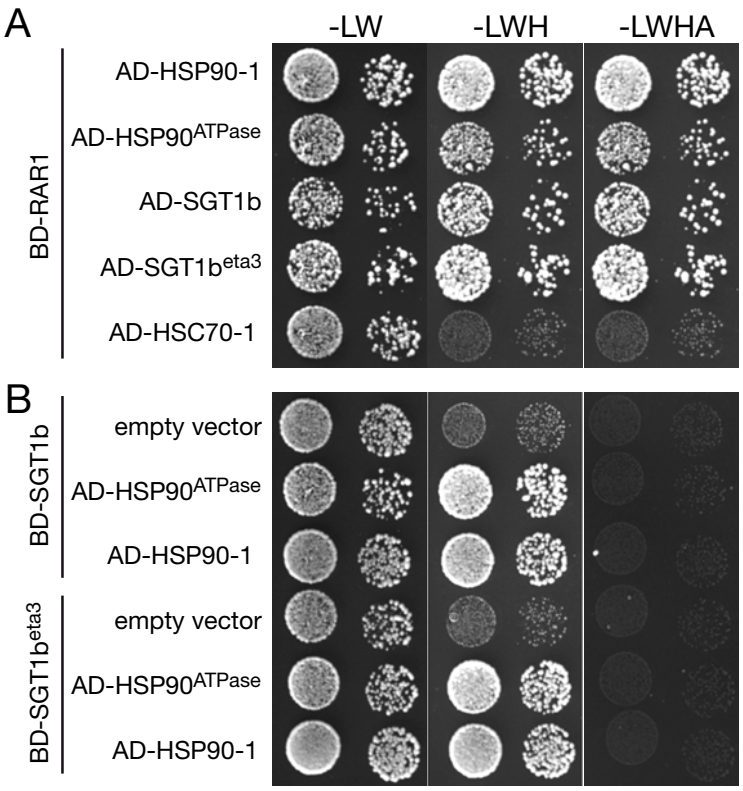
**(B)** Root growth was measured three days after transfer on 10 µM methyl jasmonate. n>10 for each data point. Errors bars indicate standard errors. *, statistically significant differences for values compared with wild type L*er* as determined by student's *t*-test (p<0,005).

**(C)** *RPP5* gene-mediated resistance assays were performed using *H. parasitica* avirulent isolate Noco2 on two-week-old *Arabidopsis* seedlings. Spores were counted 6 dpi. One representative experiment from three is shown. Each data point represents the average of triplicate measurements and errors bars indicate standard errors. *, statistically significant differences for values compared with wild type L*er* as determined by student's *t*-test (p<0,05).




**Supplemental Figure 2 online.** Mass fingerprinting of two peptides discriminating between cytosolic HSC70 isoforms

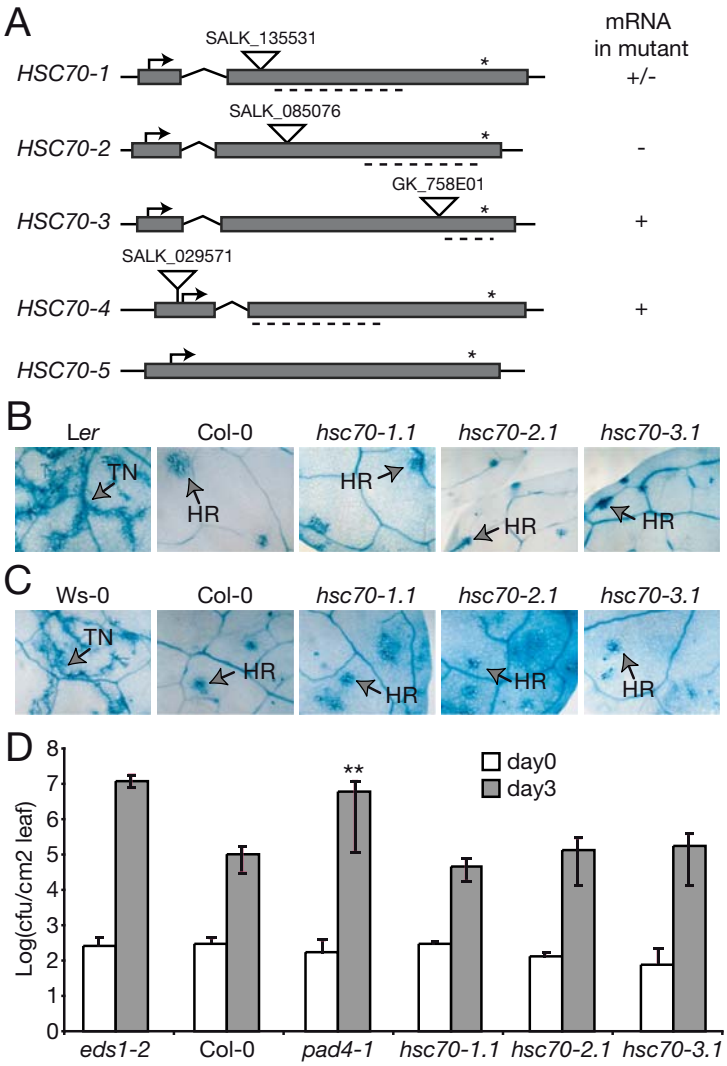
The polymorphic tryptic peptides (T) corresponding to T10 **(A)** and T16 **(B)** of HSC70-1 were used to identify specifically different cytosolic HSC70 isoforms. Corresponding peptides of HSC70-2 to -5 were aligned and polymorphic amino acids indicated by black shading. Predicted mass/charge values and charge are indicated.




**Supplemental Figure 3 online.** Interaction studies between SGT1 and RAR1 or HSP90-1 using the Clontech Matchmaker™ GAL4 yeast two-hybrid system. Different dilutions were plated on SD medium lacking Leucine (L), Tryptophan (W), Histidine (H) or Adenin (A) : -LW, bait/prey plasmid selection; -LWH, weak interaction; -LWHA, strong interaction. Picture was taken after 3 days. HSP90-1 ATPase domain (residue 1-207); SGT1b$^{eta3}$ (residue 1-322). AD, GAL4 activation domain; BD, GAL4 DNA binding domain.

**(A)** Interaction studies with RAR1, HSP90-1, SGT1b and HSC70-1.

**(B)** Interaction studies with SGT1b and HSP90-1.

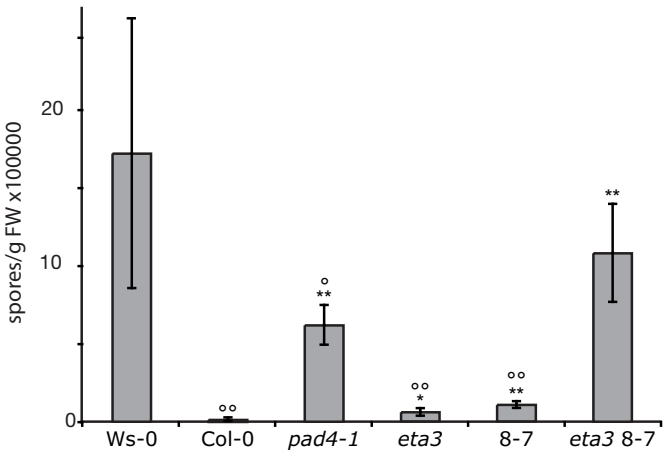



**Supplemental Figure 4 online.** Individual loss of *Arabidopsis HSC70* isoforms 1, 2 or 3 does not affect plant immune responses

**(A)** Schematic representation of the intron (chevron) -exon (grey bar) structure of the five *Arabidopsis* cytosolic *HSC70* genes. Arrows indicate translation starts and asterixes the stop codons. Triangles indicate the sites of T-DNA insertions in accession Col-0. Dashed lines mark the regions chosen for RT-PCR analysis of gene expression. Expression results of homozygous T-DNA lines are shown: (+) wild-type; (+/-) reduced; (-) not detectable.

*Arabidopsis* T-DNA insertion lines were inoculated with avirulent *H. parasitica* isolates Cala2 **(B)** or Emwa1 **(C)** and infection measured by trypan blue staining at 6 dpi. L*er* and Ws-0 plants are susceptible to Cala2 and Emwa, respectively. HR, hypersensitive response; TN, trailing necrosis.

**(D)** Bacterial growth of virulent *Pst* DC3000 after vacuum infiltration of different lines, as indicated. The *eds1-2* (L*er*) and *pad4-1* (Col) mutations compromise basal resistance. Each data point was analysed in triplicate and errors bars indicate standard errors. **, statistically significant differences for values compared with wild type Col-0 as determined by student's *t*-test (p<0,005).




**Supplemental Figure 5 online.** *SGT1b* loss-of-function and *HSC70-1* over expression have additive effects on *R* gene-mediated resistance to *H. parasitica*.

Two-week-old *Arabidopsis* seedlings were inoculated with avirulent *H. parasitica* isolates Emwa1**.** Spores were counted 6 dpi. Ws-0 plants are susceptible to Emwa1.The *pad4-1* (Col) mutation compromises *R* gene-mediated resistance. Each data point is the average of two independent experiments with duplicate measurements. Errors bars indicate standard errors. * and **, statistically significant differences for values compared with wild type Col-0 as determined by student's *t*-test ($p<0,05$ and $p<0,005$ respectively). ° and °°, statistically significant differences for values compared with line *eta3* 8-7 as determined by student's *t*-test ($p<0,05$ and $p<0,005$ respectively).

## SUPPLEMENTAL TABLE

**Supplemental Table 1 online**. Tryptic fragments observed by mass spectrometry of 70-kDa proteins co-purified with over expressed SGT1b-Strep.

| Peptide | m/z | Charge | HSC70 isoform | | | | |
|---|---|---|---|---|---|---|---|
| | | | HSC70-1 | HSC70-2 | HSC70-3 | HSC70-4 | HSC70-5 |
| A | 559,2 | 3 | T24 | T23 | T24 | T24 | T26 |
| B | 608,3[b] | 3 | T19 | | T19 | | |
| C | 615,8[b] | 2 | T10 | | | | |
| D | 639,8 | 2 | T25 | T24 | T25 | T25 | |
| E | 648,4[b] | 2 | | | T39 | | |
| F | 657,3 | 2 | T39 | | | | |
| G | 653,8[b] | 2 | T16 | | | | |
| H | 654,8 [b] | 2 | | | T16 | | |
| I[a] | 679,8[b] | 2 | T71 | T70 | T71 | T71 | |
| J | 737,4 | 2 | T4 | T4 | T4 | T4 | |
| K | 824,4 | 2 | T6 | T6 | | | |
| L | 840,5 | 2 | T17 | T16 | T17 | T17 | T18 |
| M | 962,5[b] | 3 | T53-54 | | T53-54 | | |

[a] The corresponding peptide containing an oxidized methionine was also observed

[b] Confirmed by MS-MS