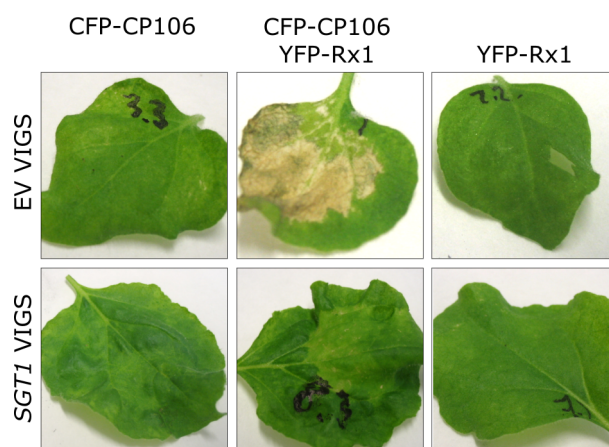


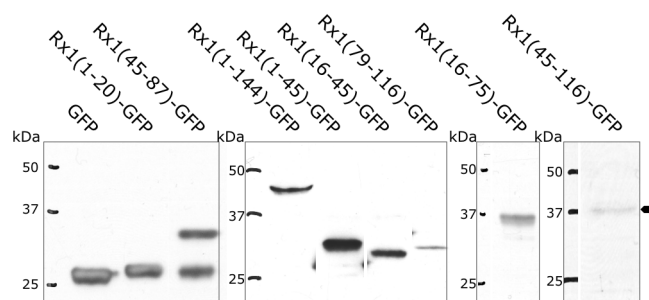
**Supplemental Figure 1.**

Activation of endogenous promoter expressed Rx1 (pRXI:Rx1) by the avirulent PVX CP (CP106) and a fluorescent protein fusion thereof (CFP-CP106). Virulent CP constructs (CP105 and CFP-CP105) were expressed as controls. The image was taken 48 hpi.



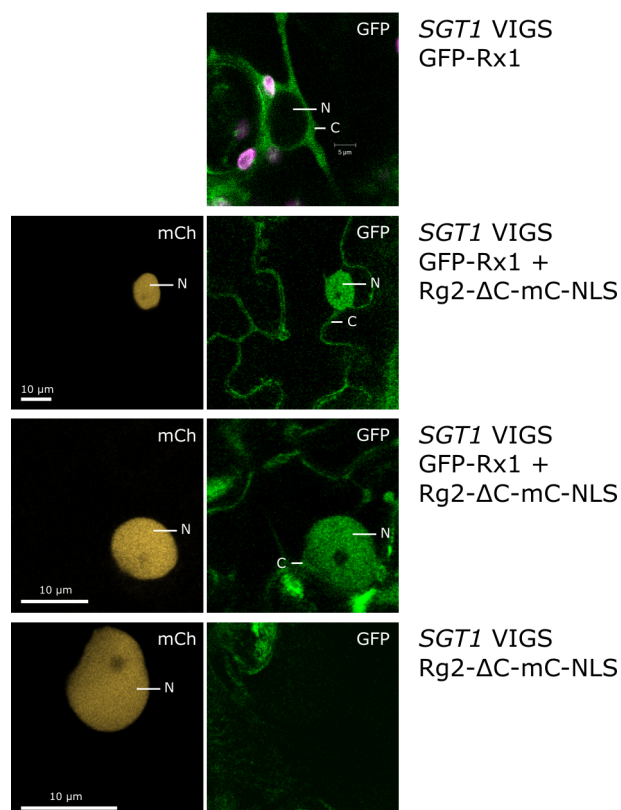
**Supplemental Figure 2.**

Rx1 mediated cell death is suppressed in *SGT1*-silenced *Nicotiana benthamiana*. Transient expression of CFP-CP106 and YFP-Rx1 in empty vector (EV) VIGS plants and *SGT1* VIGS plants. Coexpression of CFP-CP106 and YFP-Rx1 leads to a cell death response in EV VIGS plants, but not in *SGT1*-silenced plants. CFP-CP106 and YFP-Rx1 agroinfiltration 21 days after TRV infection. Images taken 6 days after agroinfiltration.



**Supplemental Figure 3.**

Anti-GFP immunoblot of the GFP-fused CC fragments. Expression via agroinfiltration assay in leaves of *N. benthamiana*. Proteins of the expected size were detected with an anti-GFP antibody and free GFP (27 kDa) was used as a control. Only for Rx1(45-89)-GFP, an additional band was observed.



**Supplemental Figure 4.**

Relocalization of GFP-Rx1 in *SGT1*-silenced cells under influence of an NLS-fused RanGAP2 WPP construct (Rg2-ΔC-mC-NLS). The top panel shows the mostly cytoplasmic localization of GFP-Rx1 in *SGT1*-silenced plants. The coexpressed RanGAP2 WPP domain is visualized via an red fluorescent protein (mCherry) fusion (left panels). The WPP fragment localizes almost exclusively to the nucleus due to the attached nuclear localization signal. The lower right panel shows that in the absence of GFP-Rx1 no GFP signal can be seen in the nucleus; there is no discernable bleed through of the mCherry signal in the GFP detection channel. Nuclei (N) and cytoplasm (C) are indicated.

**Supplemental Table 1.**

Nucleotide sequences of the oligonucleotides used in plasmid construction.

Name	Nucleotide sequence (5' – 3')
5GpRxbn	TTTTTTGGATCCATGGCTTATGCTGCTGTTACTTCCC
Rxrev	GATAGCGTCGACCACCTTAACTACTCGCTGCA
RxLSFor	TACGACCATGGATGGCTTATGCTGCTGTTAC
5UTRkp	TGGTACCTTCTGCAGCGAGTAGTTAAGGTGTTCTGAGGAC
3UTRrev	CTTAATTAACCCGGGAGATTGAGGACTCCCAAGAAAGG
bRxAdeIf	GAGATTCATATGTGCATCACCCAC
RxbnREV	AGCATAAGCCATGGATCCAAAAAATAGAAATATCTCT
5CFPsbm	GTGACCGGATCCATGGTGAGCAAGGGCGAGGAGCTGTTCC
3CFPsrk	AGGTACCTTAGCTCATGACTGACTTGTAGAGCTCGTCCATGCCGAGAG
CBPY1	CACACCGTATGCGGCCGCTGCAGTCGACGGTGTATGTTG
CBPY2	CATGACCACATCACCGTCACTGCAGCGGCCGCATACGGTGTGCATG
SV1	CATGGGCCCTAAAAAGAAGCGTAAGGTTGAGGACCCTGGATCCGTGAATTCTG
SV2	CTAGCAGAATTCACGGATCCAGGGTCTCAACCTTACGCTTCTTTTTAGGGCC
SVmut1	CATGGGCCCTAAAAACAAGCGTAAGGTTGAGGACCCTGGATCCGTGAATTCTG
SVmut2	CTAGCAGAATTCACGGATCCAGGGTCTCAACCTTACGCTTCTTTTTAGGGCC
PK1	CTACAAGGCCATGGGTAACGAGCTTGCATTAAAGCTCGCTGGTCTTGATATTAACAAGGGATCCGGT G
PK2	CTAGCACCAGGATCCCTTGTTAATATCAAGACCAGCGAGCTTAAATGCAAGCTCGTTACCCATGGCC TTGTAGAGCT
linker 12for	AGCTCTACAAGGGCGGCGGAAGTGGAGGCGGATCCGGGGGAGGCAGCATG
linker12rev	CTGCCTCCCCCGGATCCGCTCCACTTCCGCCGCCCTTGTAAG
5RexFor	CAAAGAGATTGATTTGGGGG
3Rxnnot	GCTTCTTCCGCAATAATGTCGAGGGTGCAGGCCGCTTAAAGTACCAG
3LysRrev	AGTTGTTCTCCCGATGCCTCCCATCCC
5LysRfor	GGAGGCATCGGGAGAACAACCTTTGGCTACA
3NBSeRev	TGGTACCTTAAGAATTCATGTTTCGAGCTTCCCTCAAACAG
For-LRRrx-1	ATGAATTTGTGAATGTTATCAGAGG
Rev-LRRrx-1	CTCGACATTATTGCGGCAAGAAGC
NBSerev	TGGTACCTTAAGAATTCATGTTTCGAGCTTCCCTCAAACAG
Ctyfp1	AATTCTGGAGGTTCTGGTGGCGGAGGCTCAGGCGGTGGTGAAG
Ctyfp2	CATGCTTCCACCACCGCTGAGCCTCCGCCACCAGAACCTCCAG
5NBSf	GACCATGGTTGGCCGTGAAAATGAATTTGAG
ApalRev	GGTACCTTACTGCATGGATTGTGCATGAAT
AN1	TGCACAATCCATGCAGGCGGCCGCTTAAAGGTAC
AN2	CTTAAGCGGCCGCTGCATGGATTG
3CCnot	GTGGTACCTTAAGCGGCCGACCAACCATTATATTCTCGGGCTGC
Rev-BamHI-AC	AGGATCCCATTATATTGCAG
Rev-BamHI-B	AGGATCCAGTAAGTTCCATTG
For-nc0-CD	TACCATGGAACCTTACTGGATGTG
For-nc0-EG	TACCATGGGCGATCATGAGG
Rev-BamHI-ED1	AGGATCCCCTGCTTCTTTCCTC
For-nc0-F	TACCATGGCACAGAATTTGGAGG
Rev-BamHI-GF	AGGATCCGCTGTCCGATGTTGC
5UK3cp	TCCATGGGCGGTGGAGTCATGAGCGCACCAGCTAGCACAACACAGCC
3UK3cp	AGGTACCTGCGGTTATGGTGGTGGTAGAGTGACAACAGC
5HBcp	TCCATGGGCGGTGGAGTCATGACTACGCCAGCCAACACCACTC
3HBcp	AGGTACCTGCGGTTATGGTGGGGGTAGTGAGATAACAGC
mCh1	AGTCGACGGATCCATGGTGAGCAAGGGCGAGG
mCh2	TCCCGGGTACTCGAGCTTGTACAGCTCGTCCATGC
NLST1	TCCAGGGGCCTAAAAAGAAGCGTAAGGTTGAGGACCCTGGATAATCTAGAC
NLST2	CCGGGTCTAGATTATCCAGGGTCCCAACCTTACGCTTCTTTTTAGGCCCC
T1	CTAGAGGTCGACTCTCGAGTGCACGGATCCT
T2	TCGAAGGATCCGTGCACTCGAGAGTGCACCT