Supporting Information

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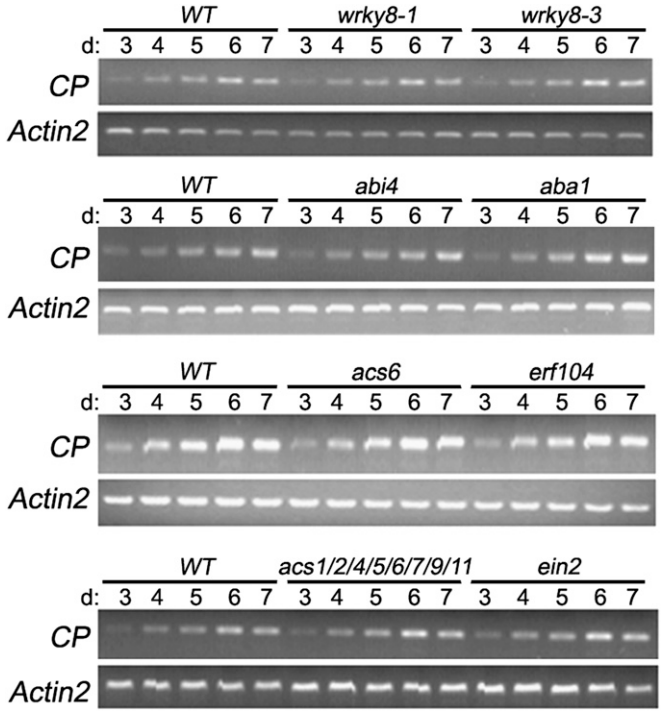

Fig. S1. Mutation of *wrky8*, *abi4*, *aba1*, *acs6*, *erf104*, *ein2*, or octuple *acs* mutant does not greatly affect the accumulation of crucifer-infecting tobacco mosaic virus (TMV-cg) in locally infected leaves. The third, fourth, and fifth true leaves of 26-d-old wild-type plants and related mutants were inoculated with TMV-cg (5 μg/mL solution in 5 mM sodium phosphate, pH 7.5), and RNA samples were prepared from locally incubated leaves at 3, 4, 5, 6, and 7 d postinfection (dpi) with TMV-cg. RT-PCR was performed using TMV-cg coat protein (CP) primers, and the *Actin2* gene was used as an internal control for an equal volume of cDNA. Data presented are representative of results obtained from three replicate experiments.

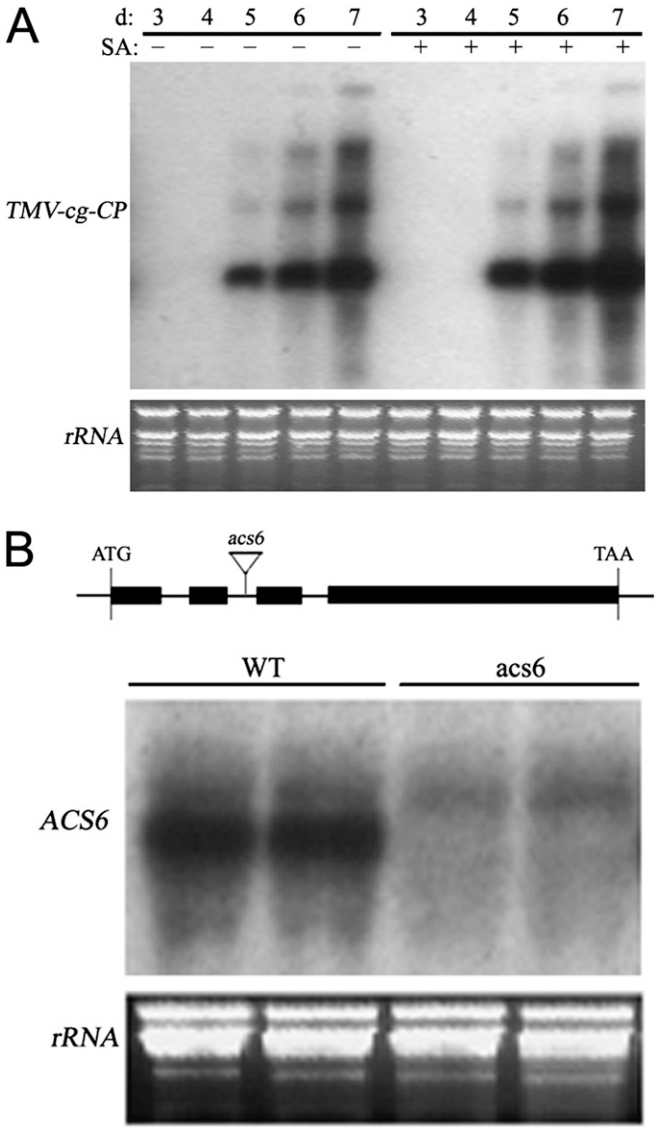

Fig. S2. Effect of salicylic acid (SA) on TMC-cg accumulation and the *ACS6* transfer dna (T-DNA) insertion mutant. (*A*) SA treatment does not affect the accumulation of TMC-cg. The third, fourth, and fifth true leaves of 26-d-old wild-type plants treated or not treated with 1 mM SA were inoculated with TMV-cg. Leaf collection, RNA isolation, and RNA blot analysis of TMV-cg CP were performed as in Fig. 1. These experiments were repeated at least twice with similar results. (*B*) Diagram of the *ACS6* gene and the T-DNA insertion in acs6 mutant and Northern blot analysis of *acs6* mutant. RNA samples were prepared from 26-d-old wild-type and *acs6* mutant leaves pretreated by wounding. RNAs were probed with an *ACS6* cDNA fragment. Ethidium bromide-stained rRNA was used as a loading control.

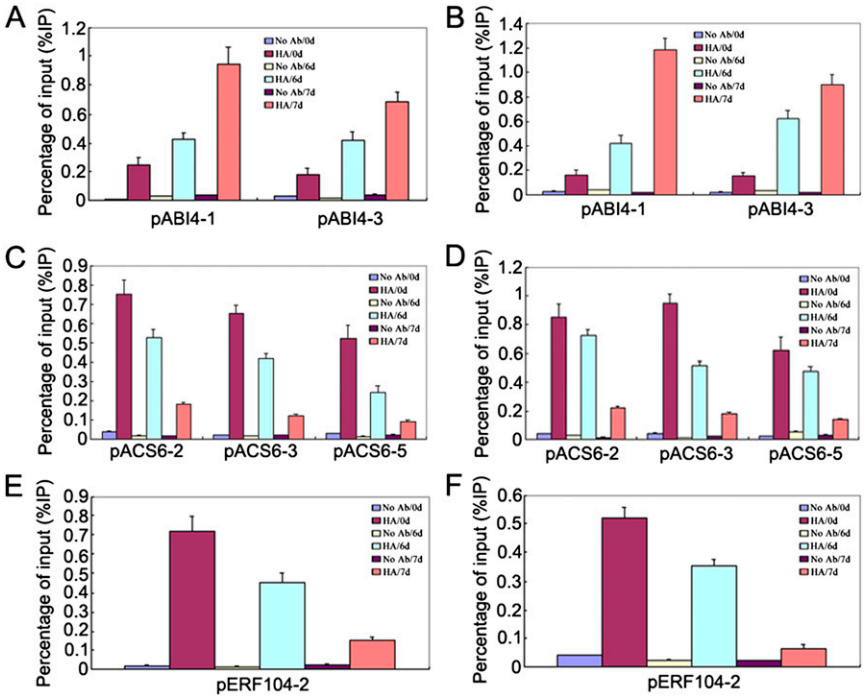

Fig. S3. *ABI4*, *ACS6*, and *ERF104* are direct targets of WRKY8. ChIP results from two experiments performed as in Fig. 6 are shown here.

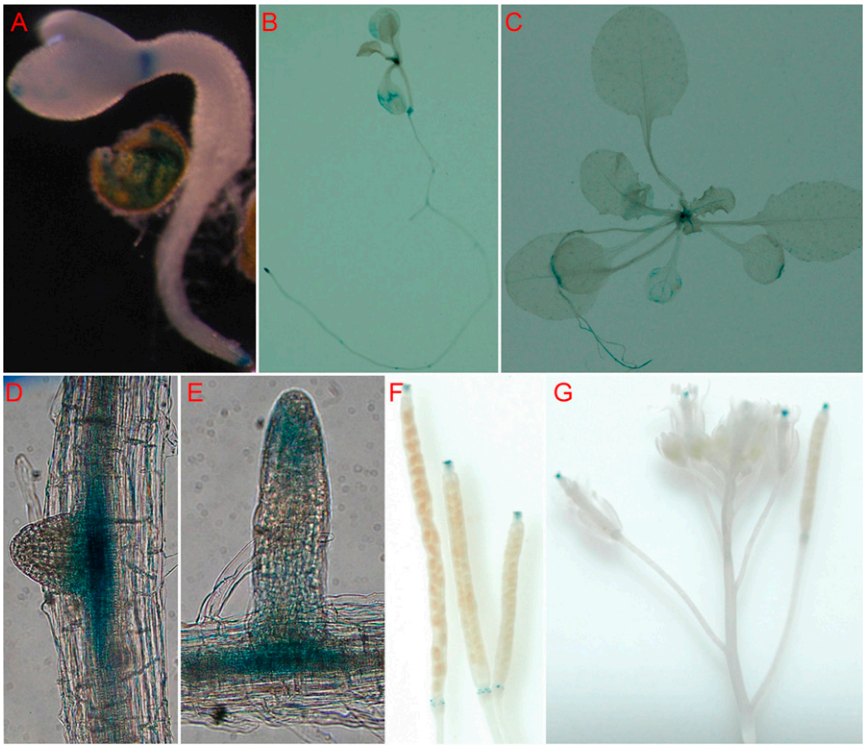

Fig. S4. β-Glucuronidase staining of *WRKY8*. (*A*) A 3-d-old seedling. (*B*) An 8-d-old seedling. (*C*) An 18-d-old seedling. (*D* and *E*) Root. (*F*) Silique. (*G*) Inflorescence.

Table S1. Genes whose expression was enhanced by TMV-cg in *wrky8-1* compared with wild type 6 dpi

Transcript ID	Annotation	Fold change (log2)
Transcription factors and signal transduction transcripts		
At3g28210	Zinc finger protein (PMZ)	6.1
At1g74930	AP2 domain containing protein	3.6
At3g01830	Calmodulin-related protein	3.2
At5g39670	Calcium-binding protein	2.9
At2g46400	WRKY46	2.7
At3g47400	Calcium-binding EF hand family protein	2.5
At5g22380	NAC transcription factor	2.4
At3g44350	NAC transcription factor	2.4
At1g80840	WRKY40	2.4
At4g04500	Receptor-like protein kinase	2.3
At5g59820	ZAT12	2.2
At3g27420	Zinc finger (C3HC4-type RING finger)	2.1
At4g23150	Serine/threonine kinase	2.1
At5g04340	Putative C2H2 zinc finger transcription factor	2.0
At3g55980	Zinc-finger transcription factor (PEI1)	1.9
At4g04490	Putative receptor-like protein kinase	1.9
At1g18570	Myb family transcription factor (MYB51)	1.9
At1g76650	Putative calmodulin	1.9
At1g11340	Receptor kinase	1.8
At3g59700	Serine/threonine-specific kinase lecPK1 precursor	1.7
At3g45860	Receptor-like protein kinase	1.7
At2g40140	Putative CCCH-type zinc finger protein	1.7
At5g22890	C2H2 zinc finger protein	1.6
At5g26920	Calmodulin-binding protein	1.5
At1g66400	Calmodulin-related protein	1.5
At3g56400	WRKY70	1.4
At4g18250	Receptor serine/threonine kinase	1.4
At4g11890	Protein kinase	1.4
At2g38470	WRKY33	1.4
At2g41410	Calmodulin-like protein	1.3
At5g67450	Cys2/His2-type zinc finger protein 1	1.3
At5g01540	Receptor like protein kinase	1.2
At1g66880	Serine/threonine protein kinase	1.2
At3g25600	Calmodulin	1.2
At1g76040	Calcium-dependent protein kinase	1.2
At2g43290	Putative calcium binding protein	1.0
At1g73805	Putative calmodulin-binding protein	1.0
At1g22190	AP2 domain containing protein PAP2	1.0
Pathogen- and stress-associated transcripts		
At2g14610	PR1	3.3
At3g57260	PR2	2.2
At1g28480	glutaredoxin	2.2
At2g32140	Putative disease resistance protein	2.2
At2g40000	Putative nematode-resistance protein	2.1
At1g57630	Disease-resistance RPP1-WsB	2.0
At1g66090	Disease-resistance	1.9
At4g13900	Putative disease resistance protein Hcr9-9A	1.8
At2g43570	Endochitinase isolog	1.8
At5g58120	Resistance protein	1.6
At3g25010	Disease-resistance protein	1.6
At2g32680	Putative disease resistance protein	1.5
At1g72940	Disease-resistance protein	1.4
At2g34930	Putative disease resistance protein	1.4
At1g75040	PR5	1.3
At3g56710	SigA binding protein	1.2
At3g48090	Disease-resistance protein EDS1	1.0
Ethylene-associated transcripts		
At4g11280	ACS6	2.5
At4g34410	ERF/AP2 transcription factor	1.9
At5g61600	ERF104	1.8
At4g17490	ERF6	1.6

Table S1. Cont.

Transcript ID	Annotation	Fold change (log2)
At5g51190	ERF/AP2 transcription factor	1.6
At2g44840	Putative ethylene response element binding protein	1.6
At5g47230	ERF5	1.5
At4g08040	ACS11	1.2
At4g17500	ERF-1	1.2
At1g28370	ERF11	1.2
At5g47220	ERF2	1.1
At3g23240	ERF1	1.0

Table S2. Primer sequences

Promoter	Primer
Primers used for quantitative RT-PCR (qRT-PCR) amplification of different promoters	
ABI4-W1-1	5′-AACTTAGTGAGCAAAGCATTG-3′
ABI4-W1-2	5′-CCAATCTCAATCATTCACG-3′
ABI4-W2-1	5′-ATTTGTCTCTTAATTTCAATGGTATAAG-3′
ABI4-W2-2	5′-GACCCACAAATATAACAAATGG-3′
ABI4-W3-1	5′-TAAGATTAATAAAAGGTGTAGTATCCAAA-3′
ABI4-W3-2	5′-TTCATTTAGTCCACTTAACACCA-3′
ACS6-W1-1	5′-TGGTTCCTGATTCCTACTCTT-3′
ACS6-W1-2	5′- CACGTGTCTTTATATTATTGGTCTAAT-3′
ACS6-W2,3-1	5′-AATAGACCGCCTTTACAGAAG-3′
ACS6-W2,3-2	5′-TAGTTAGTTACATGTGGGTGGTC-3′
ACS6-W4,5-1	5′-ATACATGAACAAAGATAAGTATTAGTAGTACAC-3′
ACS6-W4,5-2	5′-TAGAATCAGTAATGTTGATAGTGGC-3′
ACS6-W6-1	5′-GATGACCTAATTGGCCTGA-3′
ACS6-W6-2	5′-GCTTTTCGTTATCCGTTCA-3′
ACS6-W7-1	5′-GTACTCTCAGGTCCCCCA-3′
ACS6-W7-2	5′-ATTACAACGAAAGTTCCATGAA-3′
ERF104-W1-1	5′-TGAATTTGGGAAAAGTCCTAA-3′
ERF104-W1-2	5′- TTAACACTCGTTGGCACC-3′
ERF104-W2-1	5′-CTCTTATTCCCACTTCCACA-3′
ERF104-W2-2	5′-GAAATCGATGGCTAAAGCTT-3′
Primers used for RT-PCR or qRT-PCR analysis of gene expression	
WRKY8-1	5′-ATGATCTCTTCCGTGTGCCA-3′
WRKY8-2	5′-ATCATCAAGGCTCTTGTTTGAAGA -3′
ACS6-1	5′-GGAGGAGACTAAACCGATGGCTGC-3′
ACS6-2:	5′-GGCACAGGCGAATGAGGCGA-3′
ERF104-1	5′-AGCGGCGTTTCAATTACGTG-3′
ERF104-2	5′-GGCGGAGAACCCTTATCTCG-3′
ABI4-1	5′-GGGCAGGAACAAGGAGGAAG-3′
ABI4-2	5′-TAACCCGGATCCAGACCCAT-3′
ABA1-1	5′-CGAAGATGCATGCTCGTGTG-3′
ABA1-2	5′-TGTCGGACGATCTAAACCGC-3′
ABA2-1	5′-ACTCGCTTTGGCTCATTTGC-3′
ABA2-2	5′-ACAGAACAGCGTTCGCTACA-3′
ABA3-1	5′-GGGGCTGCTGTATGTGTTCT-3′
ABA3-2	5′-AAGCAAGCTTCTCCACCTCC-3′
PR1-1	5′-GCAGCCTATGCTCGGAGCTAC-3′
PR1-2	5′-TCCATTGCACGTGTTCGCAGC-3′
TMV-CP-1	5′-GCGATTGTGACACCAAACCAGCG-3′
TMV-CP-2	5′-TCGGAAGCCGATGGACGCGA-3′
ACTIN2-1	5′-TGTGCCAATCTACGAGGGTTT-3′
ACTIN2-2	5′-TTTCCCGCTCTGCTGTTGT-3′
Primers used for PCR amplifications for Northern blot analysis	
PR2-1	5′-TCCCTTGCTCGTGAATCTCT-3′
PR2-2	5′-TCGGTGATCCATTCTTCACA-3′
TMV-CP-3	5′-atgtcttacaacatcacgagctcg-3′
TMV-CP-4	5′-CTATGTAGCCGGAGCAGTAGTCC-3′

Other Supporting Information Files

Dataset S1 (XLS)