

Supplemental data

Table 1. Mutants used in this study.

Mutants	Description of mutants	Purpose
<i>line1-12/esd4-3</i>	A 49bp deletion in the last exon of <i>ESD4</i>	An <i>esd4</i> allele with loss-function mutation of <i>ESD4</i>
<i>esd4-4</i>	A 2772bp deletion in <i>ESD4</i> gene	An <i>esd4</i> allele with loss-function mutation of <i>ESD4</i>
<i>fmo1</i>	A Salk T-DNA insertion in <i>FMO1</i> gene	generating <i>fmo1esd4</i> double mutant
<i>fmo1esd4</i>	Knock out <i>ESD4</i> in <i>fmo1</i> background	Using to reveal <i>ESD4</i> regulating pathway in plant immunity
<i>eds1-2</i>	A 939bp deletion of <i>EDS1</i> gene	Using to generate <i>eds1esd4</i> double mutant
<i>eds1-2esd4-3</i>	<i>eds1-2</i> crossed with <i>esd4-3</i>	Using to reveal <i>ESD4</i> regulating pathway in plant immunity

Table 2. Primers used in this study.

Primers for vector constructing

primer name	primer sequence (5'-->3')
4g15880-BsF	ATATATGGTCTCGATTGAGATTCATGCTCCTAGTAGGTT
4g15880-F0	TGAGATTCATGCTCCTAGTAGGTTTTAGAGCTAGAAATAGC
4g15880-R0	AACCAGAATCTCTTTAGCTGTTCAATCTCTTAGTCGACTCTAC
4g15880-BsR	ATTATTGGTCTCGAAACCAGAATCTCTTTAGCTGTTC
4g23130-BsF	ATATATGGTCTCGATTGTCCTTCTAACCTTCTTCATGTT
4g23130-F0	TGTCCTTCTAACCTTCTTCATGTTTTAGAGCTAGAAAATAGC
4g23320-R0	AACCGCTGCAATCTATCAGCTACAATCTCTTAGTCGACTCTAC
4g23320-BsR	ATTATTGGTCTCGAAACCGCTGCAATCTATCAGCTAC

Primers for map-based cloning

primer name	primer sequence (5'-->3')
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T4C9-F	CAAAGGTTTCGTGTCGGAGC
T4C9-R	CGTTGACGGGATACTCGGTG
F9F13-F	CTTGGTTAGTGACCAAGCCTTA
F9F13-R	GATGAATCGTGGATAACATTCAGC
FCA2-F	GTTGATGGAACCATCCGAGGATCC
FCA2-R	GGAGCATGGTGCACCTCCTCTAG
T15B16-F	CAAATTTCACTGATTCATCGC
T15B16-R	TGATTGTTTCGATTTTGTAGTTG
F8D20-F	TTGATCTGAATAGGTCCCCC
F8D20-R	ACTGTTGCGATAATGCAGTG
F13M23-F	TGATCCCAAGGCCAGCTTAG
F13M23-R	ACTGAGAACTCAGATCG

Primers for genotyping and sanger sequencing

mutant	primer name	primer sequence (5'-->3')
<i>esd4-3</i>	esd4-3-F	cagGTATGACTGTGGAATG
	esd4-3-R	GAGGAAAATATATCGAACCG
<i>esd4-4/5</i>	chesd4-F	CACCGTATTTCCAAGCTTCC
	chesd4-R	CTTCAGCTAGACTAACCAAC
	chesd4-HR	GCTTTCTATAAGCTTCGAGG
<i>eds1-2</i>	eds1-2-g-F	ACAAGCCAAAGTGTC AAGCC
	eds1-2-g-R	CAAGCATCCCTTCTAATGTC
<i>line1</i>	line1-1-F	CGGCTTGCTGAATAATCAC
	line1-1-R	GCTTAGAATACGAAACAGAGG
	line1-2-F	CTGATCGTCCAACGATGTC
	line1-2-R	CTGAGTATCCAAGCATGCAC

Primers for real time qRT-PCR

primer name	primer sequence (5'-->3')
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EDS1-RT-F	GATTATTCAGGTGATCGAGC
EDS1-RT-R	AATCTGCGGTATCGAGTTGC
PR1 F-2	AGGCAACTGCAGACTCATAC
PR1 R-2	TTGTTACACCTCACTTTGGC
PR2-A	GCTTCCTTCTTCAACCACACAGC
PR2-B	CGTTGATGTACCGGAATCTGAC
EDS5-RT-F	GCCAAACAGGACAAGAAAGAAG
EDS5-RT-R	GCCGAAACAATCTGTGAAGC
FMO1-RT-F	GGAGATATTCAGTGGCATGC
FMO1-RT-R	TTTGGTTAGGCCTATCATGG
ALD1-RT-F	TTCCCAAGGCTAGTTTGGAC
ALD1-RT-R	GCCTAAGAGTAGCTGAAGACG
PBS3-RT-F	CTAAGTTCTGGA ACTTCTGG
PBS3-RT-R	CATGACTGAAGCAAAGATGG
PAD4-RT-F	CTCTTTCTTCAGTTAAAGATCAAGG
PAD4-RT-R	TAGTGTCCGTACCTCTGATG
ADR1-RT-F	CTTCATACAGGGGAAATGGA
ADR1-RT-R	CAGGAGACATGCCATTGTTG
SARD1-RT-F	CCCTTGCCTCGCCAATTTC
SARD1-RT-R	CAAGTGGATTGTTGTCCACG
CBP60g-RT-F	GAAGAATTGTCCGAGAGGAG
CBP60g-RT-R	GTGAAATCAGCGTTCAGCG