

A novel eggplant AP2/ERF transcription factor *StPti5* confers resistance to Verticillium wilt across different species

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ELECTRONIC SUPPLEMENTARY MATERIAL (ESM)

The authors are fully responsible for both the content and the formal aspects of the electronic supplementary material. No editorial adjustments were made.

Primer name	Primer sequence (5'-3')	Purpose
Primers for Cloning <i>StPti5</i> gene		
<i>StPti5</i> -3'Race(GSP2)	GAAGCTAATGCCCTTAACATCCC	amplify the 3'cDNA end of <i>StPti5</i> gene
<i>StPti5</i> -5' Race(GSP1)	CGCCTCTGTATTTCTTGCTATC	amplify the 5'cDNA end of <i>StPti5</i> gene
<i>StPti5</i> -F	ATGGTTCCAAC TCCCCAAAG	Primers used for full length cDNA of <i>StPti5</i> cloning
<i>StPti5</i> -R	TTAGAGCGCC AAGAAATCTCC	Primers used for full length cDNA of <i>StPti5</i> cloning
Primers for expression analysis		
<i>StPti5</i> -QF	AATGCCCTTAACATCCCA	Primers used for <i>StPti5</i> expression analysis
<i>StPti5</i> -QR	ACGCCTCTGTATTTCTTGC	Primers used for <i>StPti5</i> expression analysis
<i>St</i> -Ubiquitin-F	GTGTGGGCTCACCTACGTTT	reference for RT-qPCR
<i>St</i> -Ubiquitin-R	TGTCACCTACCTCCCCGTGTCA	reference for RT-qPCR
Primers for Subcellular localization vectors		
<i>StPti5</i> -BamHI	GGATCCATGGTTCCAAC TCCC-CAAAG	Primers used for constructing <i>StPti5</i> recombinant vector
<i>StPti5</i> -SacI	GAGCTCGAGCGCCAAGAAATCTCTCC	Primers used for constructing <i>StPti5</i> recombinant vector
Primers for transformation vectors		
<i>StPti5</i> -SacI	GAGCTCATGGTTCCAAC TCCC-CAAAG	Primers used for constructing <i>StPti5</i> recombinant vector
<i>StPti5</i> -BestI	TTCGAAGAGCGCCAAGAAATCTCTCC	Primers used for constructing <i>StPti5</i> recombinant vector

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Primers for transgenic lines detection

StPt5-Det-F AGAACGACTCACAAGAGA

StPt5-Det-R GCTTTAGCACCACGCATT

Primers for transgenic lines RT-PCR detection

StPt5-RT-F TATCCTTCGTCCGTCACAG

StPt5-RT-R AAAGCGGCTCTATCATAAGC

Ar-UBQ1-F TTCCTTGATGATGCTTGCTC

Ar-UBQ1-R TTGACAGCTCTTGGGTGAAG

Primers for fungal biomass detection

Vd-EF-1 α -F TGAGTTCGAGGCTGGTATCTVd-EF-1 α -R CACTTGGTGGTGTCCATCTT

Ar-UBQ1-F TTCCTTGATGATGCTTGCTC

Ar-UBQ1-R TTGACAGCTCTTGGGTGAAG

Primers for detecting genes expression in Arabidopsis transgenic lines

ERF2-F GCTCCAACGAACCCGACTCATC

ERF2-R TGTCGAACGTACCGAGCCAGAC

ERF3-F TAACCTCCGTGGTCCTAAAGCC

ERF3-R CTGTTGTTGATGGTCGGTGAAT

ERF4-F CTAAGGCTAAGACCAATTTC-
CAACT

ERF4-R CCGTCGCTGAAGGCACAACCTAA

ERF104-F GAGAACGGTTTCAACAAAGACA

ERF104-R TAAGTCCCAAGCCAGATCCTAC

EIN2-F GGTATGGTGCGTCTTATGGTCG

EIN2-R AACTGCTCAAAGGGCTGTCTGG

ETR2-F AGAAGTTGAGTGACGAGCAGAA

ETR2-R ACAAACATCTCGCCATACAAGC

PR1-F GCTCTTGTAAGTGCTCTTGTT

PR1-R AGTTGTAGTTAGCCTTCTCGCT

PR2-F AAGTTGTGCGAGAAGCCA

PR2-R GTGTGCTGGGAAGACATAGTT

PDF1.2-F TCACCCCTATCTTCGCTGCTCT

PDF1.2-R ATGATCCATGTTTGGCTCCTTC

PR5-F CTCTTCCTCGTGTTTCATCACA

PR5-R TCAATTCAAATCCTCCATCG

Ar-UBQ1-F TTCCTTGATGATGCTTGCTC

Ar-UBQ1-R TTGACAGCTCTTGGGTGAAG

Primers used for StPt5 transgenic lines detecting

Primers used for StPt5 transgenic lines detecting

Primers used for StPt5 transgenic lines RT-PCR detect-
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ingreference for RT-PCR *detecting*reference for RT-PCR *detecting*Primers used for quantative PCR of *V. dahliae*Primers used for quantative PCR of *V. dahliae*

Primers used for quantative PCR of Arabidopsis

Primers used for quantative PCR of Arabidopsis

RT-qPCR for ERF2 gene

RT-qPCR for ERF2 gene

RT-qPCR for ERF3 gene

RT-qPCR for ERF3 gene

RT-qPCR for ERF4 gene

RT-qPCR for ERF4 gene

RT-qPCR for ERF104 gene

RT-qPCR for ERF104 gene

RT-qPCR for EIN2 gene

RT-qPCR for EIN2 gene

RT-qPCR for ETR2 gene

RT-qPCR for ETR2 gene

RT-qPCR for PR1 gene

RT-qPCR for PR1 gene

RT-qPCR for PR2 gene

RT-qPCR for PR2 gene

RT-qPCR for PDF1.2 gene

RT-qPCR for PDF1.2 gene

RT-qPCR for PR5 gene

RT-qPCR for PR5 gene

reference for RT-qPCR

reference for RT-qPCR