

Table S3. All primers used in this study.

Usage	Primer Name	Sequence (5'-3')
Primers for CRISPR/Cas9 vectors construction		
Cas9/gRNA-PtrFLA40	DT1-BsF/ PtrFLA40	ATATATGGTCTCGATT <u>GATATATGTAGGGTTGTGTC</u> GTT
	DT1-F0/ PtrFLA40	<u>TGATATATGTAGGGTTGTGTC</u> GTTTTAGAGCTAGAAATAGC
	DT2-R0/ PtrFLA40	AACAAGACGAAAACCGCTTATTCAATCTCTTAGTCGACTCTAC
	DT2-BsR/ PtrFLA40	ATTATTGGTCTCTAAACAAGACGAAAACCGCTTATTC
Cas9/gRNA-PtrFLA45	DT1-BsF/ PtrFLA45	ATATATGGTCTCGATTGTCACAAAGTTATACAAACTGTT
	DT1-F0/ PtrFLA45	<u>TGTCACAAAGTTATACAAACT</u> GTTTTAGAGCTAGAAATAGC
	DT2-R0/ PtrFLA45	AACTGGTTTAAACCATCTTTGCACAATCTCTTAGTCGACTCTAC
	DT2-BsR/ PtrFLA45	ATTATTGGTCTCTAAACTGGTTTAAACCATCTTTGCAC
Cas9/gRNA-PtrFLA40FLA45	DT1-BsF/ PtrFLA40FLA45	ATATATGGTCTCGATTGCGCTAAATGACTCAAGCCCCGTT
	DT1-F0/ PtrFLA40FLA45	<u>TGCGCTAAATGACTCAAGCCCC</u> GTTTTAGAGCTAGAAATAGC
	DT2-R0/ PtrFLA40FLA45	AACTTGTCCTCAATACCTTTGCCCAATCTCTTAGTCGACTCTAC
	DT2-BsR/ PtrFLA40FLA45	ATTATTGGTCTCTAAACTTGTCCTCAATACCTTTGCC
Primers used to identify Cas9-gRNAs targeted sites		
gPtrFLA40-identify	Identify PtrAP40-F	TAACTTGATCCTCTGCTCACAAC
	Identify PtrAP40-R	GTCTGTGTATACGGTGCCAGAT
gPtrFLA45-identify	Identify PtrAP45-F	TATTGCACCTAACTATATAACCTC
	Identify PtrAP45-R	GGCTAGTTGGTTGTCTGTGTATA
Primers used to identify transgenic plants		

Note: Underlined letters come from PAM.

zCas	zCas-F	TGAGAACATCGTCATTGAGATGG
	zCas-R	CAGCTTGTCATTCTCATCGTACT
Hyg	Hyg-F	GAGCTTGTCGATCGACAGAT
	Hyg-R	CATATGCGCGATTGCTGATC
M13	M13F	TGTA AACGACGGCCAGT
	M13R	CAGGAAACAGCTATGACC
Primers of PtrFLAs used for RT-qPCR and RT-PCR		
<i>PtrFLA2/Potri.001G320800</i>	PtrFLA2-F	GGCTGGCCACTTCAAGACCT
	PtrFLA2-R	GCAGGTGCCGGTGGTGGAGG
<i>PtrFLA5/Potri.002G223300</i>	PtrFLA5-F	CCTAACTCAAGACCAGGTGAA
	PtrFLA5-R	CCTGGAGCGCTCCCATCTCC
<i>PtrFLA6/Potri.004G210600</i>	PtrFLA6-F	GGCTGGCCACTTCACTGTC
	PtrFLA6-R	ATCAGTGTATACGGTGCCGG
<i>PtrFLA8/Potri.006G129200</i>	PtrFLA8-F	GCACCACCTGACAACGCCTT
	PtrFLA8-R	GGTGCTGGTGCTGCCGCTGT
<i>PtrFLA13/Potri.009G012100</i>	PtrFLA13-F	CTGGCTCCTCTTCCTCCATG
	PtrFLA13-R	AAGCGGGAAGTTCCGGTCTG
<i>PtrFLA14/ Potri.009G012200</i>	PtrFLA14-F	GCAGACTCCTCACAGGCACC
	PtrFLA14-R	GTCAGTGTATACAGTGCCTG
<i>PtrFLA17/Potri.012G015000</i>	PtrFLA17-F	TCCCAGACACCTACAGCAGC
	PtrFLA17-R	CCTGATAGATAGCAAGCTGGC
<i>PtrFLA18/Potri.012G127900</i>	PtrFLA18-F	CCACCTGGTCCAACCAATGT
	PtrFLA18-R	CACTGAGTTACCTGTGGTGG
<i>PtrFLA19/ Potri.013G014200</i>	PtrFLA19-F	CACAGGCAGCTCAACCACAC
	PtrFLA19-R	CTGGTATTGGTAAGTCCTG

<i>PtrFLA20/ Potri.013G120600</i>	PtrFLA20-F	GCCACACTCATTCGCCTTCT
	PtrFLA20-R	CAGACACCATCTTGGCCTGA
<i>PtrFLA21/Potri.013G151300</i>	PtrFLA21-F	ATGCTTCTTCTTTCCCTGTG
	PtrFLA21-R	GATGGTTATACCAGTGTGG
<i>PtrFLA22/Potri.013G151400</i>	PtrFLA22-F	GTTTCTAGTAGAATAGCCTGG
	PtrFLA22-R	GTCTGAAACTGGGAAGTGGAT
<i>PtrFLA23/Potri.013G151500</i>	PtrFLA23-F	GCACAGGCACCAGCAGCAGT
	PtrFLA23-R	CTGGTGCAGGTGCTACCGGT
<i>PtrFLA26/Potri.014G162900</i>	PtrFLA26-F	CACCATCACCTCCTTACGTT
	PtrFLA26-R	GCTCACTTGGCTAAGGTTCT
<i>PtrFLA28/Potri.015G013300</i>	PtrFLA28-F	CCCAGCCACCAAATGCAGCA
	PtrFLA28-R	GGCCGAAAAGGCACCATCAG
<i>PtrFLA29/Potri.015G129400</i>	PtrFLA29-F	GCACCACCCGGTCCAACCAA
	PtrFLA29-R	GATAGTGCCGGATACGCTTG
<i>PtrFLA31/Potri.016G088700</i>	PtrFLA31-F	CGGCGATCCTTGCGAAAGCT
	PtrFLA31-R	AGTGTTTGCCACGGTTGCAG
<i>PtrFLA38/ Potri.019G093300</i>	PtrFLA38-F	GGTGGTCAGTTCGTCACATTC
	PtrFLA38-R	CAAACACCTTCTTGCCAGA
<i>PtrFLA39/ Potri.019G120800</i>	PtrFLA39-F	CCAACGAAACCACTTGTCT
	PtrFLA39-R	GTACCTAGAGGGTTACTTACA
<i>PtrFLA40/Potri.019G120900</i>	PtrFLA40-F	CCACCCAAGACGAAAACCGC
	PtrFLA40-R	TCTGGTGCAGATGCCACTGG
<i>PtrFLA41/ Potri.019G121100</i>	PtrFLA41-F	GCGTTAAATGATTCAAGCACT
	PtrFLA41-R	GCAACTATACCAACTGACCC
<i>PtrFLA42/Potri.019G121200</i>	PtrFLA42-F	CACCAACGTCACCATAATCC

	PtrFLA42-R	GTCCTTAGGGAGGAGTACCT
<i>PtrFLA43/ Potri.019G121300</i>	PtrFLA43-F	CGGCAGTAGTCGTAGCACCA
	PtrFLA43-R	GCTTGAATCATTAGTGCGG
<i>PtrFLA44/ Potri.019G122600</i>	PtrFLA44-F	CTACTTCTCAGTTCCAGACC
	PtrFLA44-R	CTCTCTACAGTTACAGCAGG
<i>PtrFLA45/Potri.019G122800</i>	PtrFLA45-F	CTTTGCCCAGTCGCAAGCTG
	PtrFLA45-R	GGCTAGTTGGTTGTCTGTGT
<i>PtrFLA46/ Potri.019G123000</i>	PtrFLA46-F	CTCTAGGTACATGGGCTGGAA
	PtrFLA46-R	GCAACAACCTATACCAACTGATC
<i>PtrFLA47/ Potri.019G123100</i>	PtrFLA47-F	ACGTCACCAAAATCCTTGAG
	PtrFLA47-R	TGTACTTAGGGAGGAGCACC
<i>PtrFLA48/ Potri.019G123200</i>	PtrFLA48-F	CGGCAGTAGTCGTAGCACCA
	PtrFLA48-R	GCTTGAATCATTAGTGCGG
<i>PtrActin2</i>	PtrActin2-F	AACATGGGATTGTTAGCAACTGG
	PtrActin2-R	TCCATCACCAGAATCCAGCACA
Primers used for RT-PCR		
<i>PtrCesA4/Potri.002G257900</i>	PtrCesA4-F	GAGTTAAGGAAGATGGAGAGGTGT
	PtrCesA4-R	TGCACTGAGGACAGGACTGGTTGC
<i>PtrCesA7A/Potri.006G181900</i>	PtrCesA7A-F	TCGCCTTTCTCTCAGATACGAACG
	PtrCesA7A-R	TTACCCGTAACAAGAGGGGGTTCC
<i>PtrCesA7B/Potri.018G103900</i>	PtrCesA7B-F	CCCCTCTAGTCACGGGCAACACAC
	PtrCesA7B-R	AAGGTGCACATTGAAGCACCATCG
<i>PtrCesA8A/Potri.011G069600</i>	PtrCesA8A-F	GTTGGCCTCTGTCTTCTCTTTGTC
	PtrCesA8A-R	CAATCTATAGAAATGCAGGTTTCAC
<i>PtrCesA8B/Potri.004G059600</i>	PtrCesA8B-F	GTTGGCCTCTGTCTTCTCTTTGTT

	PtrCesA8B-R	CAATCAATGGAAATGCAGGTCTCCG
<i>PtrPAL4/Potri.010G224100</i>	PtrPAL4-F	ACGTTGGTGTTCATGGTGGAG
	PtrPAL4-R	GTGATAGCTTCCAGCATCTC
<i>Ptr4CL3/Potri.001G036900</i>	Ptr4CL3-F	ACGTTGAGCTCACAGCAAGA
	Ptr4CL3-R	ACGCACATGACCTTAACATC
<i>PtrC3H3/Potri.006G033300</i>	PtrC3H3-F	AGTTGGGTGCATCACTTGCA
	PtrC3H3-R	AACACTGTCCAACCTTTCCT
<i>PtrCCoAOMT2/Potri.001G304800</i>	PtrCCoAOMT2-F	AGGAAGGCACCAGGAAGTTG
	PtrCCoAOMT2-R	GTGCGCAACACCAGCTTTCT
<i>PtrF5H2/Potri.007G016400</i>	PtrF5H2-F	GAGAGATGAGGTGGACTCAA
	PtrF5H2-R	GCATCTTCAGAGAAGTTATT
<i>PtrCOMT2/Potri.012G006400</i>	PtrCOMT2-F	GATGCGCCTGTTCATGTTAGA
	PtrCOMT2-R	TCCCTTATTGAAGACCTTGT
<i>PtrEXPA1/Potri.001G240900</i>	PtrEXPA1-F	ATGTCATCGTTGTGGATGGC
	PtrEXPA1-R	ACCATCTTGGGTCACTTGCA
<i>PtrEXPA3/Potri.010G167200</i>	PtrEXPA3-F	GGAGGCTGGATTAATGCTCA
	PtrEXPA3-R	AATTGGTGGCGGTGATCACA
<i>PtrEXPA4/Potri.008G088300</i>	PtrEXPA4-F	GGTCTTGCTACGAGATTAGG
	PtrEXPA4-R	ACAACACCAGCACTGTATCG
<i>PtrEXPA5/Potri.009G031800</i>	PtrEXPA5-F	GTCATTGATGTGGAAGGGTG
	PtrEXPA5-R	ACCATTGTGGGTCATCTGCG
<i>PtrEXPA7/Potri.008G057100</i>	PtrEXPA7-F	GTACGGTAACTTGTACAGCC
	PtrEXPA7-R	GGCGATCTTGAGGAACATAG
<i>PtrEXPA16/Potri.006G086100</i>	PtrEXPA16-F	GGCAATCTGTATAGCCAAGG
	PtrEXPA16-R	TCAAAGTGAGGACGAGGTGG

<i>PtrCYCD3;3/Potri.005G141900</i>	PtrCYCD3;3-F	CATTGGCTCTTGACGGGCTT
	PtrCYCD3;3-R	TCAACTGCCTCTCTACGAAC