Table S4. The Cas9/gRNA-targeted mutations in *PtrFLA40* and *PtrFLA45.*

Gene: Potri.019G120900 (*PtrFLA40*)						
Vector: Cas9/gRNA-*PtrFLA40* **gRNA**: g*PtrFLA40*-T1 (**CCC**AAGACGAAAACCGCTTATTC); g*PtrFLA40*-T2 (GATATATGTAGGGTTGTGTC**CGG**) **Target sequences**: *PtrFLA40*-T1, **CCC**AAGACGAAAACCGCTTATTC; *PtrFLA40*-T2, GATATATGTAGGGTTGTGTC**CGG**						
Line (#)	*PtrFLA40*-T1 **CCC**AAGACGAAAACCGCTTATTC	**Mutation types** (Number of plasmids containing the cloned PCR products)		*PtrFLA40*-T2 GATATATGTAGGGTTGTGTC**CGG**	**Mutation types** (Number of plasmids containing the cloned PCR products)	
ptrfla40-1#	**CCC**AAGACGAAA-CCGCTTATTC **CCC**AAGA-GAAAACCGCTTATTC **CCC**AAGACGAAAACCGCTTATTC	-1 (×8) -1 (×7) 0 (×5)	chimera	GATATATGTAGGGTTGTGTC**CGG**	0 (×20)	WT
ptrfla40-2#	**CCC**AAGACGAAA-CCGCTTATTC	-1 (×20)	homozygous	GATATATGTAGGGTTGTGTC**CGG**	0 (×20)	WT
ptrfla40-3#	**CCC**AAGA(A)CGAAAACCGCTTATTC	+1 (×20)	homozygous	GATATATGTAGGGTTGTGTC**CGG**	0 (×20)	WT
ptrfla40-4#	**CCC**AAGACGAAA-CCGCTTATTC **CCC**AAG(T)ACGAAAACCGCTTATTC **CCC**AAGACGAAAACCGCTTATTC	-1 (×12) +1 (×5) 0 (×3)	chimera	GATATATGTAGGGTTGTGTC**CGG**	0 (×20)	WT
ptrfla40-5#	**CCC**AAG(T)ACGAAAACCGCTTATTC **CCC**AAGACGAAAACCGCTTATTC	+1 (×13) 0 (×7)	heterozygous	GATATATGTAGGGTTGTGTC**CGG**	0 (×20)	WT
ptrfla40-6#	**CCC**AAGA(A)CGAAAACCGCTTATTC **CCC**AAGACGAAA-CCGCTTATTC	+1 (×11) -1 (×9)	biallelic	GATATATGTAGGGTTGTGTC**CGG**	0 (×20)	WT
Gene: Potri.019G122800 (*PtrFLA45*)						
Vector: Cas9/gRNA-*PtrFLA45* **gRNA**: g*PtrFLA45-T1* (**CCC**TGGTTTAACCATCTTTGCAC); g*PtrFLA45-T2* (GTCACAAAGTTATACAAACT**CGG**) **Target sequences**: *PtrFLA45-T1*, **CCC**TGGTTTAACCATCTTTGCAC; *PtAP66*-4, GTCACAAAGTTATACAAACT**CGG**						
Line (#)	*PtrFLA45*-T1 **CCC**TGGTTTAACCATCTTTGCAC	**Mutation types** (Number of plasmids containing the cloned PCR products)		*PtrFLA45*-T2 GTCACAAAGTTATACAAACT**CGG**	**Mutation types** (Number of plasmids containing the cloned PCR products)	
ptrfla45-1#	**CCC**TGGT----------.....	-178 (×20)	homozygous	.....---------- ACT**CGG**	-178 (×20)	homozygous

ptrfla45-2#	**CCC**T-----AACCATCTTTGCAC	-5 (×20)	homozygous	GTCACAAAGTTATACAA-CT**CGG**	-1 (×20)	homozygous
ptrfla45-3#	**CCC**TGG-----CCATCTTTGCAC **CCC**TGGTTTAACCATCTTTGCAC	-5 (×13) 0 (×7)	heterozygous	GTCACAAAGTTATACAA--T**CGG** GTCACAAAGTTATACAAACT**CGG**	-2 (×9) 0 (×11)	heterozygous
ptrfla45-4#	**CCC**TGGT----------..... **CCC**TGGTTTAACCATCTTTGCAC	-178 (×14) 0 (×6)	heterozygous	.....---------- ACT**CG**G GTCACAAAGTTATACAAACT**CGG**	-178 (×14) 0 (×6)	heterozygous
ptrfla45-5#	**CCC**TGG----------..... **CCC**TGGTTTAACCATCTTTGCAC	-179 (×11) 0 (×9)	heterozygous	.....----------ACT**CGG** GTCACAAAGTTATACAAACT**CGG**	-179 (×11) 0 (×9)	heterozygous
ptrfla45-6#	**CCC**TGGTTT----------GCAC	-10 (×20)	homozygous	GTCACAAAGTTATACAAACT**CGG**	0 (×20)	homozygous
ptrfla45-7#	**CCC**TGGT----------..... **CCC**TGG----------..... **CCC**TGGTTTAACCATCTTTGCAC	-178 (×9) -179 (×7) 0 (×4)	chimera	.....---------- ACT**CGG** .....----------ACT**CGG** GTCACAAAGTTATACAAACT**CGG**	-178 (×9) -179 (×7) 0 (×4)	chimera
Vector: Cas9/gRNA-*PtrFLA40/45* **gRNA**: g*PtrFLA40/45-T1* (**CCA**TTGTCCCAATACCTTTGCCC); g*PtrFLA40/45-T2* (GCGCTAAATGACTCAAGCCC**TGG**) **Target sequences**: *PtrFLA40-T1*, **CCA**TTGTCCCAATACCTTTGCCC; *PtrFLA40-T2*, GCGCTAAATGACTCAAGCAC**TGG** *PtrFLA45-T1*, **CCA**TTGTCCCAATACCTTTGCCC; *PtrFLA45-T2*, GCGCTAAATGACTCAAGCCC**TGG**						
Line (#)	*PtrFLA40/45*-T1 *PtrFLA40*, **CCA**TTGTCCCAATACCTTTGCCC *PtrFLA45*, **CCA**TTGTCCCAATACCTTTGCCC	**Mutation types** (Number of plasmids containing the cloned PCR products)		*PtrFLA40/45*-T2 *PtrFLA40*,GCGCTAAATGACTCAAGCAC**TGG** *PtrFLA45*,GCGCTAAATGACTCAAGCCC**TGG**	**Mutation types** (Number of plasmids containing the cloned PCR products)	
ptrfla40/45-1#-fla40	**CCA**TT(A)GTCCCAATACCTTTGCCC ----------TGCCC	+1 (×15) -18 (×5)	biallelic	GCGCTAAATGACTCAAGCAC**TGG**	0 (×20)	WT
-fla45	**CCA**----------.....	-222 (×20)	homozygous	.....----------CCCTGG	-222 (×20)	homozygous
ptrfla40/45-2#-fla40	**CCA**T-GTCCCAATACCTTTGCCC	-1 (×20)	homozygous	GCGCTAAATGACTCAAGCAC**TGG**	0 (×20)	WT
-fla45	**CCA**T-GTCCCAATACCTTTGCCC	-1 (×20)	homozygous	GCGCTAAATGACTCAAG(A)CCC**TGG**	+1 (×20)	homozygous
ptrfla40/45-3#-fla40	**CCA**T-GTCCCAATACCTTTGCCC **CCA**TTGTCCCAATACCTTTGCCC	-1 (×14) 0 (×6)	heterozygous	GCGCTAAATGACTCAAGCAC**TGG**	0 (×20)	WT
-fla45	**CCA**T-GTCCCAATACCTTTGCCC -------TACCAATACCTTTGCCC	-1 (×12) -7 (×8)	biallelic	----------**TGG** GCGCTAAATGACTCAAGCCC**TGG**	-20 (×12) 0 (×8)	heterozygous
ptrfla40/45-4#-fla40	**C**-----TACCAATACCTTTGCCC **CCA**--GTCCCAATACCTTTGCCC **CCA**TTGTACCAATACCTTTGCCC	-5 (×8) -2 (×3) 0 (×9)	chimera	GCGCTAAATGACTCAAGCAC**TGG**	0 (×20)	WT
-fla45	**CCA**T-GTCCCAATACCTTTGCCC	-1 (×20)	homozygous	----------**TGG**	-20 (×20)	homozygous

ptrfla40/45-5#-fla40	**C**-----TCCCAATACCTTTGCCC	-5 (×20)	homozygous	GCGCTAAATGACTCAAGCAC**TGG**	0 (×20)	WT
-fla45	**C**--TTGTCCCAATACCTTTGCCC	-2 (×20)	homozygous	GCGCTAAATGAC-----CCC**TGG**	-5 (×20)	homozygous
ptrfla40/45-6#-fla40	**CCA**T-GTCCCAATACCTTTGCCC **CCA**TTGTCCCAATACCTTTGCCC	-1 (×11) 0 (×9)	heterozygous	GCGCTAAATGACTCAAGCAC**TGG**	0 (×20)	WT
-fla45	**CCA**T-GTCCCAATACCTTTGCCC -------TACCAATACCTTTGCCC **CCA**TTGTACCAATACCTTTGCCC	-1 (×4) -7 (×7) 0 (×9)	chimera	GCGCTAAATGACTCAAG(G)CCC**TGG** GCGCTAAATGACTCAAGCCC**TGG**	+1 (×8) 0 (×12)	heterozygous
ptrfla40/45-7#-fla40	......----------.....	-254 (×20)	homozygous	GCGCTAAATGACTCAAGCAC**TGG**	0 (×20)	homozygous
-fla45	**C**--TTGTCCCAATACCTTTGCCC **CCA**T-GTCCCAATACCTTTGCCC -------TACCAATACCTTTGCCC .....----------.....	-2 (×2) -1 (×5) -7 (×7) -254 (×6)	chimera	GCGCTAAATGAC-----CCC**TGG** ----------**TGG** GCGCTAAATGACTCAAGCCC**TGG** .....---------.....	-5 (×2) -20 (×5) 0 (×7) -254(×6)	chimera
ptrfla40/45-8#-fla40	.....----------.....	-254 (×20)	homozygous	GCGCTAAATGACTCAAGCAC**TGG**	0 (×20)	homozygous
-fla45	**CCA**T-GTCCCAATACCTTTGCCC -------TACCAATACCTTTGCCC	-1 (×15) -7 (×5)	biallelic	.....---------- C**TGG** ----------**TGG** GCGCTAAATGACTCAAGCCC**TGG**	-191 (×1) -20 (×14) 0 (×5)	chimera
ptrfla40/45-9#-fla40	**CCA**--GTCCCAATACCTTTGCCC	-2 (×20)	homozygous	GCGCTAAATGACTCAAGCAC**TGG**	0 (×20)	WT
-fla45	**CCA**T-GTCCCAATACCTTTGCCC -------TACCAATACCTTTGCCC	-1 (×18) -7 (×2)	biallelic	----------**TGG** GCGCTAAATGACTCAAGCCC**TGG**	-20 (×18) 0 (×2)	heterozygous