Table S1. Oligonucleotide sequences for generating constructs

Construct	Forward Oligonucleotides (5' to 3')	Reverse Oligonucleotides (5' to 3')
GOF5	GGCCGAATTCTTCTTCAAAATTTATAACATTTTCATGTTGTG	GGCCGGATCCTTTTATTGTCGTGCCATTTTGTTTTTTATTACG
GOF7	CGCGCGGAATTCAAAATTTACTATGTTTATTTCGAAATTTAGAAAAACG	GGTCACGAATTCCAAGAAAATTTTGCGTGAAAACTTTTTTTATTG
GOF9	CACAATTCCACACATTATACGAGCCGG	TCTAGAGGATCCCCGGGTACCGAGCTCGTGTGGTTTTCTTCGCTTTTCATTAC
GOF10	GTGCCCGAATTCAAGCCTAGAAAAACGAAGAGTTAC	CTAGAGGATCCCCGGGTAC
GOF11	GTGCCCGAATTCAAGCCTAGAAAAACGAAGAGTTAC	TCTAGAGGATCCCCGGGTACCGAGCTCGTTTCTTGATTGTCGTGCCATTTTG
GOF12	GTGCCCGAATTCAAGCCTAGAAAAACGAAGAGTTAC	TCTAGAGGATCCCCGGGTACCGAGCTCGTGTGGTTTTCTTCGCTTTTCATTAC
GOF13	AATTCGAAAAGCGAAGAAAAGCGAAG	GATCCTTCGCTTTTCTTCGCTTTTCG
GOF14	AATTCGAAAAGCGAAG	GATCCTTCGCTTTTCG
GOF15	AATTCGAAAAGCGAAGAAAAGCGAAG	GATCCTTCGCTTTTCTTCGCTTTTCG
GOF16	AATTCGAAAAGCGAAGAAAAGCGAAGAAAAGCGAAGAAAAGCGAAGAAAAGCGAAG	GATCCTTCGCTTTTCTTCGCTTTTCTTCGCTTTTCTTCGCTTTTCTTCGCTTTTCG
pBSG564-662	GGCCGGATCCAAAGTTTTCACGCAAAATTTTCTTGG	GGCCTCTAGAGATCAATTCCACAGTTTTCGCGATC
G564 -883/-874	AATTCTCAAAGCCTATCAAAGCCTAG	GATCCTAGGCTTTGATAGGCTTTGAG
G564 -836/-827	AATTCGAAAACCACAGAAAACCACAG	GATCCTGTGGTTTTCTGTGGTTTTCG
G564 -823/-814	AATTCTAAAAACAAATAAAAACAAAG	GATCCTTTGTTTTTATTTGTTTTTAG
GA 20-OXIDASE +222/+213	AATTCGGAAAGAGAAGGAAAGAGAAG	GATCCTTCTCTTTCCTTCTCTTTCCG
GA 20-OXIDASE +215/+206	AATTCGAAAAGAGGAGAAAAGAGGAG	GATCCTCCTCTTTTCTCCTCTTTTCG
GA 20-OXIDASE -2498/-2489	AATTCGAATAGAGAAGAATAGAGAAG	GATCCTTCTCTATTCTTCTCTATTCG
GA 20-OXIDASE -1410/-1419	AATTCGAAAAGCAAGGAAAAGCAAGG	GATCCCTTGCTTTTCCTTGCTTTTCG
PcWOX9-like +94/+85	AATTCGAGAAGGGAAGAGAAGGGAAG	GATCCTTCCCTTCTCTTCCCTTCTCG
PcWOX9-like +365/+356	AATTCTAAAAGGGAATAAAAGGGAAG	GATCCTTCCCTTTTATTCCCTTTTAG
PcWOX9-like -3186/-3195	AATTCGAAAAGGGTAGAAAAGGGTAG	GATCCTACCCTTTTCTACCCTTTTCG
PcWOX9-like -2699/-2708	AATTCGAAAAACGACGAAAAACGACG	GATCCGTCGTTTTTCGTCGTTTTTCG
PcWOX9-like -282/-273	AATTCGAAAATAGAAGAAAATAGAAG	GATCCTTCTATTTTCTTCTATTTTCG
PcWOX9-like -732/-741	AATTCGAAAAAAGAAGAAAAAAGAAG	GATCCTTCTTTTTTCTTCTTTTTTCG
PtNIP1;1 -814/-805	AATTCGAATTGCAAAGAATTGCAAAG	GATCCTTTGCAATTCTTTGCAATTCG
PtNIP1;1 -725/-716	AATTCGTAAATTGAAGTAAATTGAAG	GATCCTTCAATTTACTTCAATTTACG
PtNIP1;1 -615/-624	AATTCGTAAAGAGAAGTAAAGAGAAG	GATCCTTCTCTTTACTTCTCTTTACG
PtNIP1;1 -528/-537	AATTCCAATAACGAACAATAACGAAG	GATCCTTCGTTATTGTTCGTTATTGG
M1	GGTACCAGAATTCGGCCGCGGGGGGCCCCATGTTGTGTTTGTTTCAAAGC	CTAGAGGATCCCCGGGTAC
M2	GTACCAGAATTCAATTTATAACATTTTGGCCGCGGGGGGCCCTCAAAGCCTAGAAAAACGAAGAG	CTAGAGGATCCCCGGGTAC
M3 5'-fragment	GGTACCAGAATTCAATTTATAACATTTTCATGTTGTGTTTG	CTCTTCGTGGGCCCCCCGCGGCCAACAAACACAACATGAAAATGTTATAA
M3 3'-fragment	TGTTTGTTGGCCGCGGGGGGCCCACGAAGAGTTACTATTGGTAATGAAAAG	CTAGAGGATCCCCGGGTAC
M4 5'-fragment	GGTACCAGAATTCAATTTATAACATTTTCATGTTGTGTTTG	CATTACCAGGGCCCCCCGCGGCCTTTTCTAGGCTTTGAAACAAACAC

Construct	Forward Oligonucleotides (5' to 3')	Reverse Oligonucleotides (5' to 3')
M4 3'-fragment	CTAGAAAAGGCCGCGGGGGGCCCTGGTAATGAAAAGCGAAGAAAAC	CTAGAGGATCCCCGGGTAC
M5 5'-fragment	GGTACCAGAATTCAATTTATAACATTTTCATGTTGTGTTTG	GTTTTCTTGGGCCCCCCGCGGCCATAGTAACTCTTCGTTTTTCTAGGCTTTG
M5 3'-fragment	GTTACTATGGCCGCGGGGGGCCCAAGAAAACCACATAATAAAAACAAAATG	CTAGAGGATCCCCGGGTAC
M6 5'-fragment	GGTACCAGAATTCAATTTATAACATTTTCATGTTGTGTTTG	TGTTTTTAGGGCCCCCCGCGGCCCGCTTTTCATTACCAATAGTAACTC
M6 3'-fragment	GAAAAGCGGGCCGCGGGGGGCCCTAAAAACAAAATGGCACGACAATCAAG	CTAGAGGATCCCCGGGTAC
M7 5'-fragment	GGTACCAGAATTCAATTTATAACATTTTCATGTTGTGTTTG	ATTGTCGTGGGCCCCCCGCGGCCTTATGTGGTTTTCTTCGCTTTTC
M7 3'-fragment	CCACATAAGGCCGCGGGGGGCCCACGACAATCAAGAAAAAGTTTTCAC	CTAGAGGATCCCCGGGTAC
M8 5'-fragment	GGTACCAGAATTCAATTTATAACATTTTCATGTTGTGTTTG	GAAAACTTGGGCCCCCCGCGGCCGCCATTTTGTTTTTATTATGTGG
M8 3'-fragment	AAAATGGCGGCCGCGGGGGGCCCAAGTTTTCACACAAAACTTTTTTC	CTAGAGGATCCCCGGGTAC
M9	GGTACCAGAATTCAATTTATAACATTTTCATGTTGTGTTTG	TAGAGGATCCCCGGGTACCGAGCTCGAATTTTGAAAAAAGTGGGCCCCCCGCGGCCTTTCTTGATTGTCGTGCC
M10	GGTACCAGAATTCAATTTATAACATTTTCATGTTGTGTTTG	TAGAGGATCCCCGGGTACCGAGCTCGGGGCCCCCCGCGGCCTTTGTGTGAAAACTTTTTCTTGATTG
15-bp NEGATIVE	AATTCGGCCGCGGGGGGCCCCGAGCTCGGTACCCGGG	GATCCCCGGGTACCGAGCTCGGGGCCCCCCGCGGCCG
M11	AAGCTGGAATTCAAGCCTACGGGGGGCCCGAGTTACTATTGGTAATGAAAAG	TCTAGAGGATCCCCGGGTACCGAGCTCGTGTG
M12	CACAATTCCACACATTATACGAGCCGG	TAGAGGATCCCCGGGTACCGAGCTCGTGTGGTTTTCGGGCCCCCCGATTACCAATAGTAACTCTTCGT
M13	AAGCTGGAATTCAAACCTAGAAAAACGAAGAGTTAC	TCTAGAGGATCCCCGGGTACCGAGCTCGTGTG
M14	CACAATTCCACACATTATACGAGCCGG	TAGAGGATCCCCGGGTACCGAGCTCGTGTGGTTTTCTTCGCTTTTCATTACTAATAGTAACTCTTCGTTTTTCTAG
M15 5'-fragment	ACCAGTTTCCTCAAGGGTCC	CGAAGTTCATGCCAGTCCAGCGCCGCGGCCGGATCCTTCGCTTTTCGAATTC
M15 3'-fragment	CTGGCATGAACTTCGGTCCGCGGGGGGCCCATTAATTAATTAATTTTCATTTACTTTTTTCC	CCAGTTGCAACCACCTGT
M16 5'-fragment	ACCAGTTTCCTCAAGGGTCC	CGAAGTTCATGCCAGTCCAGCGCCGCGGCCATATATAACTTTCTGCGCACCAAGA
M16 3'-fragment	CTGGCATGAACTTCGGTCCGCGGGGGGCCCAGTTAAATTATTATTATTTTCATTTAAAATATAAATATT	CCAGTTGCAACCACCTGT
M17 5'-fragment	ACCAGTTTCCTCAAGGGTCC	CGAAGTTCATGCCAGTCCAGCGCCGCGGCCTTAAAATAAAAAGGAAAAAAGTAAATGA
M17 3'-fragment	CTGGCATGAACTTCGGTCCGCGGGGGGCCCATATAAAAAATATAACCTTAATCAAAACAAAGC	CCAGTTGCAACCACCTGT
M18 5'-fragment	ACCAGTTTCCTCAAGGGTCC	CGAAGTTCATGCCAGTCCAGCGCCGCGGCCTTAAATAATATTTATATTTTAAATGAAAATAATAATAATT
M18 3'-fragment	CTGGCATGAACTTCGGTCCGCGGGGGGCCCTTTACAACACTTTTAACCTTAAAATTAACTTT	CCAGTTGCAACCACCTGT
M19 5'-fragment	ACCAGTTTCCTCAAGGGTCC	CGAAGTTCATGCCAGTCCAGCGCCGCGGCCTTTTAGATTAAGGCTTTGTTTTGATTAA
M19 3'-fragment	CTGGCATGAACTTCGGTCCGCGGGGGGCCCTAGTGTGACAACTAAAAAAGTTGTATACAACC	CCAGTTGCAACCACCTGT
M20 5'-fragment	ACCAGTTTCCTCAAGGGTCC	CGAAGTTCATGCCAGTCCAGCGCCGCGGCCTCATTTTCCTTTTAAAGTTAATTTTAAGG
M20 3'-fragment	CTGGCATGAACTTCGGTCCGCGGGGGGCCCAGAAATAAATATATATAATAAAGAGTAAATTTGTAATTAAATG	CCAGTTGCAACCACCTGT
M21 5'-fragment	ACCAGTTTCCTCAAGGGTCC	CGAAGTTCATGCCAGTCCAGCGCCGCGGCCAAACCTATGACAGGGTTGTATACAACTT

Construct	Forward Oligonucleotides (5' to 3')	Reverse Oligonucleotides (5' to 3')
M21 3'-fragment	CTGGCATGAACTTCGGTCCGCGGGGGGCCCATAAAAAAGTATTAAAATAATAATATTTAGAGTAGTAATATG	CCAGTTGCAACCACCTGT
M22 5'-fragment	ACCAGTTTCCTCAAGGGTCC	CGAAGTTCATGCCAGTCCAGCGCCGCGGCCATCATTTAATTACAAATTTACTCTTTATTATATATATTTATTTC
M22 3'-fragment	CTGGCATGAACTTCGGTCCGCGGGGGGCCCGTATAAAAAAATGTGGTTGTCCATATATC	CCAGTTGCAACCACCTGT
M23 5'-fragment	ACCAGTTTCCTCAAGGGTCC	CGAAGTTCATGCCAGTCCAGCGCCGCGGCCAACCATATTACTACTCTAAATATTATTATTTTAATACTTT
M23 3'-fragment	CTGGCATGAACTTCGGTCCGCGGGGGGCCCTATCATGACAAATATTTTCACCGAAA	CCAGTTGCAACCACCTGT
M24 5'-fragment	ACCAGTTTCCTCAAGGGTCC	CGAAGTTCATGCCAGTCCAGCGCCGCGGCCTTTTAAAGTGAATAATGATATATGGACAACC
M24 3'-fragment	CTGGCATGAACTTCGGTCCGCGGGGGGCCCGCGTTGGATAATGGAAAAATACAA	CCAGTTGCAACCACCTGT
M25 5'-fragment	ACCAGTTTCCTCAAGGGTCC	CGAAGTTCATGCCAGTCCAGCGCCGCGGCCTCTTTTCGTTCTTTCCATCTTTCG
M25 3'-fragment	CTGGCATGAACTTCGGTCCGCGGGGGGCCCGCATAACATTTTGTATTAGTGATGAGTTTT	CCAGTTGCAACCACCTGT
M26 5'-fragment	ACCAGTTTCCTCAAGGGTCC	CGAAGTTCATGCCAGTCCAGCGCCGCGGCCAAAGTACTGGAGGGAGATTGCTTG
M26 3'-fragment	CTGGCATGAACTTCGGTCCGCGGGGGGCCCAGAATATAGGAAAATTTTAGAATCACGTGG	CCAGTTGCAACCACCTGT
M27 5'-fragment	ACCAGTTTCCTCAAGGGTCC	CGAAGTTCATGCCAGTCCAGCGCCGCGGCCAAATATATATGATAAAAAACTCATCACTAATACAA
M27 3'-fragment	CTGGCATGAACTTCGGTCCGCGGGGGGCCCTAATATTTTAATTTATAATGTAGTTGATTTTATTTG	CCAGTTGCAACCACCTGT
M28 5'-fragment	ACCAGTTTCCTCAAGGGTCC	CGAAGTTCATGCCAGTCCAGCGCCGCGGCCCTATTATATAGCTATCCACGTGATTCTAAAA
M28 3'-fragment	CTGGCATGAACTTCGGTCCGCGGGGGGCCCATACATAAATATGTGTTGATAGTGGGTGA	CCAGTTGCAACCACCTGT

Underlined nucleotides are incorporated restriction sites.

Nucleotides shown in blue are a part of the 15-bp mutation sequence.

Nucleotides shown in green are a part of the 45-bp mutation sequence.