

**Supplementary File 2.** Synthetic oligonucleotide used in this study. Start codons and stop codons are in bold. Restriction sites on primers are underlined. A brief description of what each primer was used for is provided.

Primer name	Primer sequence (5'-3')	Brief description
<b>Isolation of <i>GmMKS2</i> promoter region</b>		
Promoter-GmMKS2-F	CTTGATGTTGGCGAATGC	Forward primer located in the 5'UTR of <i>GmMKS2</i> gene
Promoter-GmMKS2-R	CAACGGCGAAACTGATCG	Reverse primer located in the first exon of <i>GmMKS2</i> gene
<b>Detection of <i>GmMKS2</i> alternative splicing variants (<i>GmMKS2-X1</i> and <i>GmMKS2-X3</i>)</b>		
GmMKS2-Met-F	<u>CCATGGATGAGCTACAACCACA</u> CTTC	Forward primer located in the first exon of <i>GmMKS2</i> gene
GmMKS2-45nt-R	CTGGTTGCATGTTCTTATTATG	Reverse primer located in the last 45 nucleotides of intron 3.
<b>Isolation of <i>GmMKS2</i> transcripts</b>		
GmMKS2-5'UTR-F	AGGCAAAGGTCTTGAG	Forward primer for amplifying full-length <i>GmMKS2-X1</i> , <i>GmMKS2-X2</i> , and <i>GmMKS2-X3</i> variants as well as <i>GmMKS2</i> genomic sequence
GmMKS2-3'-UTR-R	GTTACCTCCTCCTCACTCAC	Reverse primer for amplifying full-length <i>GmMKS2-X1</i> , <i>GmMKS2-X2</i> , and <i>GmMKS2-X3</i> variants as well as <i>GmMKS2</i> genomic sequence
<b>Real-time PCR analysis</b>		
GmMKS2-X1-qF	GTATTAATTGCGATGCTGTG	Forward primer for <i>GmMKS2-X1</i> qPCR

GmMKS2-X1-qR	CAAATTGTCTCCACTTCTTAG	Reverse primer for <i>GmMKS2-X1</i> qPCR
GmMKS2-X2-qF	ATTGGTATTAATTGCGATGCTG	Forward primer for <i>GmMKS2-X2</i> qPCR
GmMKS2-X2-qR	GAGAACAAATATTGGAAAACAG AATC	Reverse primer for <i>GmMKS2-X2</i> qPCR
GmMKS2-X3-qF	TAGTTATTGCCAGCACGGTCG	Forward primer for <i>GmMKS2-X3</i> qPCR
GmMKS2-X3-qR	GACAAGCAAAATTGGAGAGGC	Reverse primer for <i>GmMKS2-X3</i> qPCR
cons6-qF	CTTTTACATTATACCCGGCAGA TTG	Forward primer for <i>cons6</i> qPCR
cons6-qR	CCCATCCAGAACATCAAAATCAGA AT	Reverse primer for <i>cons6</i> qPCR
<b>Recombinant protein expression</b>		
<i>Nde</i> I-GmMKS2-X1/X2/X3-sf-F	<u>CATATG</u> AGTGGATTCCATGAC	Forward primer for amplifying the region encoding the mature GmMKS2-X1, GmMKS2-X2, and GmMKS2-X3
<i>Xba</i> I-GmMKS2-X1/X2-sf-R	<u>CTCGAG</u> TTAAGAGTCCTCAATT	Reverse primer for amplifying the region encoding the mature GmMKS2-X1 and GmMKS2-X2
<i>Xba</i> I-GmMKS2-X3-sf-R	<u>CTCGAG</u> TTAGTGTACTAAAATGT ATAAGGAGGT	Reverse primer for amplifying the region encoding the mature GmMKS2-X3