

Supplementary Table S1. The information of primers used in this study.

Purpose	Gene	Forward primer	Reverse primer
Gateway cloning	<i>TaFBXL</i>	ATGGTTAGTGCAGGTCAGTGG	TCAGTACGCATGGCTGGTGGC
	<i>TaGPI-AP</i>	ATGGATTCCAGGGCCGCCCTCT	CTTCATCAGCAAACTACGAA
	<i>TaABP1</i>	ATGGCGAGTGGACACACAACAGCTG	TTACAGTTCATCTTTAGGTGCGTCT
qRT-PCR	<i>TaFBXL</i>	TCAGCAACCTCATGGTGT	AAACACCGGATGCGACAA
	<i>TaGPI-AP</i>	CGACAACCAGCTCCTCAA	TTCTTTGCTAGCTGCTCG
	<i>Actin</i> (AB181991)	GCCACACTGTTCCAATCTA	TGATGGAATTGTATGTCCG

Supplementary Table S2. The CDS and peptide sequence of the TaFBXL gene.

TaFBXL_CDS sequence
ATGGTTAGTGCAGGTCAGTGGACAGGCAGTTGGATACATGCTTCAGCAACCTCATGGTGTCTAGCGGC GGTGAAGGGGGCAGGCTGAAACTGGTGGCGCTATGCCTATGTTGTCAGGATGGAAGGACCTGCCAATG GAGCTGCTTATGCGGATCATATCAGTTGCTGGAGATGATCGAATTGTCGTTGTCGCATCCGGTGTTCG ACTGGCTGGCGCGACGCGTTAGGACGGGGGGTTACTAATCTTCCCTTTTCATGGTGCCAGCAGAACATG AATAACTTAACGATATCATTTGCTCACAAGTTCACAAAGCTTCAGGTTCTCACTCTTCGCCAAATCAAA CCTCAGCTCGAAGACAGTGCAGTAGAGGCTGTTGCCAACTACTGTTATGATCTACGTGAGTTAGACCTC AGCCGAAGTTTTTCGGCTTAGTGACCGATCGTTGTATGCATTGGCCAATGGATGTCTCGGCTTACAAAA CTGAACATCAGTGGGTGTTCCAGTTTCAGTGACAGTGCCTTAATCTACCTTAGTTGCCACTGTAAAAAC CTGAAGAGCTTGAATCTTTGTGGATGTGGAAGGCAGCCACTGATGAGTCCTTGCCAGGCCATAGCCCAA AACTGTGGGCACCTGCAATCTTTAAACCTAGGTTGGTGTGACAATGTCACAGATGAGGGGGTTACCAGC TTGGCATCAGGCTGCCCTGATCTCAGGGCCCTGGATTGTGTGGCTGTGTTCTTATAACAGACGAAAGT GTTATTGCTCTAGCAAGCGGGTGCCCGTACCTGCGATCTTTGGGCCTGTACTACTGCCAGAACATCACC GACCGTGCCATGTACTCCCTCGCAAACAGCTGCGTGAAGAGCAAACGAGGGAGGTGGGGCACCCTCGCGG AGCAGCAGCAGCAACTCGAAGGACGTCGACGGGCTGGCTAATCTGAACATCAGCCAGTGCACGGCCCTG ACGCCTCCCGCGGTTTCAGGCGGTGTCGACTCCTTCCCGTCGCTCCACACCTGCCCGGAGAGGCACTCC CTCATCATCAGCGGTTGCCTCAGCCTGACTAACGTCCACTGTGCCTGCGGCCTCCAGCGCCACCGCGCC GGAAGCGCCCTGCAGGCCACCAGCCATGCGTACTGA
TaFBXL amino acid sequence
MVSARSVDRQLDTCFSNLMVSSGGGRGQAETGGAMPMLSGWKDLPMELLMRIISVAGDDRIVVVASGVC TGWRDALGRGVTNLSLSWCQQNMNNLTISFAHKFTKLQVLTLRQIKPQLEDSAVEAVANYCYDLRELDL SRSFRLSDRSLYALANGCPRLTKLNISGCSSFSDSALIYLSCHCKNLKSLNLCGCGKAATDES LQAI AQ NCGHLQSLNLGWCDNVTDEGVTS LASGCPDLRALDLCGCVLITDES VIALASGCPYLRSLGLYYCQNIT DRAMYSLANSCVKS KRGRWGT PRSSSSNSKDVDGLANLNI SQCTALT PPAVQAVCD SFPSLHTC PERHS LIISGCLSLTNVHCACGLQRHRAGSALQATSHAY*

Supplementary Table S3. High-confidence domains and repeats in the TaFBXL protein.

Domain name	Domain start (bp)	Domain end (bp)	e-value	SMART accession no.	Definition
F-box	44	84	2.0e-9	SM000256	A receptor for ubiquitination targets

LRR	103	129	2.0e-8	SM000370	Leucine-rich repeats
LRR	130	155	4.54e-4		
LRR	156	181	1.47e-3		
LRR	182	208	4.24e-4		
LRR_CC	209	234	2.07e-7	SM000367	Leucine-rich repeat, cysteine-containing subfamily
LRR_CC	235	260	5.17e-8		
LRR_CC	261	286	2.77e-8		
LRR	308	333	3.0e-8	SM000370	Leucine-rich repeat