

Table S2: Primers for PCR, vector construction and genetic transformation.

Primer use	Primer name	Primer sequence(5'-3')
Target gene primer	<i>PvFAD3</i> -up	CTGCTCTAGCTCTTCCTCTGTCTCT
	<i>PvFAD3</i> -do	TGCTACATGACTGTCTGTATCCTGT
Gene site-specific mutation primer(Underline is the mutation site)	<i>mPvFAD3</i> -up	CTGCTCTAGCTCTTCCTCTGTCTCT
	<i>mPvFAD3</i> -do	TGCTACATGACTGTCTGTATCCTGT
	<i>msite</i> -up	GCCATGGGAGCTTTTCCA <u>AC</u> AGCATTCTGCTTAAC
	<i>msite</i> -do	GTTAAGCAGAATGCTGT <u>T</u> GGAAAAGCTCCCATGGC
Seamless cloning primer(Underline is the cleavage site)	T-pYES2-up	ACTATAGGGAATATTA <u>AAGCTTT</u> GTAAAACGACGGCCAGT
	T-pYES2-do	TGCTGGATATCTGCAGA <u>AATTC</u> CAGGAAACAGCTATGACC
	T-pBI121-up	GAGAACACGGGGGACT <u>CTAGAT</u> GTAAAACGACGGCCAGT
	T-pBI121-do	CGATCGGGGAAATT <u>CGAGCTC</u> CAGGAAACAGCTATGACC
Sequencing primer	M13F	TGTAACGACGGCCAGT
	M13R	CAGGAAACAGCTATGACC
	T7	TAATACGACTCACTATAGGGAGA
	CYC1-Ter	GTGACATAACTAATTACATGATG
	CX-up	TGTAACGACGGCCAGT
	CX-do	GCAAGTGGATTGATGTGAT
	SALK_071996C-LP	TTTCTGGGCCATCTTTGTTC
	SALK_071996C-RP	GTTTTCGGGGCAGATTCTAAC
Homozygous identification of <i>A. thaliana</i> mutants	LBb1.3	ATTTTGCCGATTTCCGAAC
Screening transgenic <i>A. thaliana</i> positive seedlings	St-pBI121-up	TGTAACGACGGCCAGT
	St-pBI121-do	GCAAGTGGATTGATGTGAT