

Supplemental Table S1. Sequences of primers used in this study

Name	Sequence (5'-3')	Function
GmATX1-F	TAAAGACACCACCTTACACAC	Gene isolation
GmATX1-R	GAAACAGACCTACTTCCACATAGA	Gene isolation
pA7-GmATX1-F	CATTTACGAACGATACTCGAGATGTCTTCTCAGACCGTTG	Subcellular localization assay
pA7-GmATX1-R	CTCGAGTATCGTTTCGTAAATGAGCAACAGTTTCAACAGCA	Subcellular localization assay
pBI121-ATX1-F	GAGAACACGGGGGACTCTAGAATGTCTTCTCAGACCGTTG	Transgenic
pBI121-ATX1-R	TCTAGAGTCCCCCGTGTCTCAGCAACAGTTTCAACAGCA	Transgenic
pBI121-GUS-35s-F	TGAAGATGCCTCTGCCGA	Transgenic
pBI121-GUS-GUS-R	CTGATCGTTAAAACTGCCTGG	Transgenic
TRV2-ATX1-F	GTGAGTAAGGTTACCGAATTCCGGAAAGAAGACGGCATTC	Primers used for VIGS vector construction
TRV2-ATX1-R	CGTGAGCTCGGTACCGGATCCTTTCAACAGCAGTTTCTGA	Primers used for VIGS vector construction
TRV2-GmPDS-F	GTGAGTAAGGTTACCGAATTCTCCACCTTTCGTGCTTCTC	Primers used for VIGS vector construction
TRV2-GmPDS-R	CGTGAGCTCGGTACCGGATCCTCAGGTACGCCCTGCTTTT	Primers used for VIGS vector construction
qRT-GmPDS-F	CGTTTCATTGGACGGGGCTT	Detection of <i>PDS</i> relative expression
qRT-GmPDS-R	CAAACGACACGCAAGGGAGA	Detection of <i>PDS</i> relative expression
qRT-GmATX1-F	TTCTCAGACCGTTGTCCTCA	Detection of <i>ATX1</i> relative expression
qRT-GmATX1-R	CACATAGAAAAATAGAAC	Detection of <i>ATX1</i> relative expression
qRT-GmATX1-F	TTCTCAGACCGTTGTCCTCA	Quantitative real-time PCR expression analysis in soybean
qRT-GmATX1-R	TTCAGTGCACCTTCTGCTCCT	Quantitative real-time PCR expression analysis in soybean
Actin-F	CCTCAACCCAAAGGTCAACAG	Quantitative real-time PCR expression analysis
Actin-R	GACCAGCGAGATCCAAACGAA	Quantitative real-time PCR expression analysis
Tubulin-F	CTCAAGAGGTTCTCAGCAGTA	For genetically functional verification
Tubulin-R	TCACCTTCTTCATCCGCAGTT	For genetically functional verification