

**S1 Table. PCR primers for *ZmPP2AA1* cloning and molecular characterization of *ZmPP2AA1* transgenic maize.**

Primer	Sequence
<i>ZmPP2AA1</i> ORF-F	CTGATGGCTATGATTGATG
<i>ZmPP2AA1</i> ORF-R	CAAAGGCTAGTTAGCTTGA
<i>ZmPP2AA1</i> OE-F	TTAGGATCCATGGCTATGATTGATG
<i>ZmPP2AA1</i> OE-R	AAAGGATCCTTAGCTTGACACCATC
<i>ZmPP2AA1</i> RNAi-F	CAACCCGGGACTAGTTGTGAGGCTGTTGGCCCT
<i>ZmPP2AA1</i> RNAi-R	CTCGGATCCGAGCTCAATTGCTGGTAGCAGTGA
<i>ZmPP2AA1</i> PCR-F	GCGTATCGTCCTGTGGTC
<i>ZmPP2AA1</i> PCR-R	CAGGAGCCATTCCCATAA
<i>bar</i> PCR-F	ATGAGCCCAGAACGACGCC
<i>bar</i> PCR-R	TCAAATCTCGGTGACGGGC
<i>ZmPP2AA1</i> qRT-F	GGCTGTGCTGCCCTTGTA
<i>ZmPP2AA1</i> qRT-R	CCTATCCGCACTTCAGCCTC
<i>actin</i> qRT-F	ATCACCATTGGGTCAGAAAGG
<i>actin</i> qRT-R	GTGCTGAGAGAAGCCAAAATAGAG

*ZmPP2AA1* ORF primers were used for full ORF amplification of *ZmPP2AA1* ORF; *ZmPP2AA1* OE and *ZmPP2AA1* RNAi primers were used for overexpression and RNAi vectors construction, respectively; *ZmPP2AA1* PCR and *bar* PCR primers were used for *ZmPP2AA1* and *bar* detection in transgenic plants, respectively; *ZmPP2AA1* qRT and *actin* qRT primers were used for qRT-PCR for *ZmPP2AA1* and *actin*, respectively.