

Supplementary materials

Table 1. Gene-specific primer sequences used in the RT-qPCR analysis of gene expression.

Gene name	Gene ID	Primer name	Primer sequence
<i>PpNAC1</i>	PCP044783	PpNAC1-F	5'-CCAAACATACCCACCAAGCA -3'
		PpNAC1-R	5'-TGAGCTACTTCCTTCGCCAA-3'
<i>PpNAC2</i>	PCP012487	PpNAC2-F	5'-TGACAAACACCAGAACAGCG-3'
		PpNAC2-R	5'-CCGAACGTGAAACATTGCGC-3'
<i>PpNAC3</i>	PCP013078	PpNAC3-F	5'-AAAGATGGTGAGCTGGTGGT-3'
		PpNAC3-R	5'-GTACTCCACAAGACCTGCCT-3'
<i>PpCOMT</i>	PCP007841	PpCOMT-F	5'-GTTTACACCGGCTACTCCCT -3'
		PpCOMT-R	5'-CCCCAACCTTCACCAAATCG -3'
<i>Pp4CL</i>	PCP024172	Pp4CL-F	5'-ACTCCTACTGCCTCCACAAC -3'
		Pp4CL-R	5'-GCTGCCTCATCCTTCATTGG -3'
<i>PpCAD1</i>	JX290376	PpCAD1-F	5'-GATGTCACAGACCCAAAGGCA-3'
		PpCAD1-R	5'-AGGCGTTCGAGGTTTCCAT-3'
<i>PpCAD2</i>	KJ577637	PpCAD2-F	5'-TTGGTTGAGAGAGTTGCCAC-3'
		PpCAD2-R	5'-ATTCGACACCCAAGCTCTTCG-3'
<i>PpCCR</i>	PCP040222	PpCCR-F	5'- ATGTCGAAGCAGGGTGAGGT-3'
		PpCCR-R	5'- CTAGGCATTGGAGTACTCA-3'
<i>PcActin</i>	AF386514	PcActin-F	5'-CCCAGAAGTGCTCTCCAAC-3'
		PcActin-R	5'-TTGATCTTCATGCTGCTGG-3'
<i>NtActin</i>	AB158612	NtActin-F	5'-TGTTGGAATGGAAGCTGCTG-3'

NtActin-R

5'-TTTGC~~G~~GTGGACAATGGAAG-3'

Table 2. Primer sequences used in the cloning of *PpNAC187* and transgenic plant validation.

Gene name	Primer name	Primer sequence
<i>PpNAC3</i>	PpNAC3-F	5'-ATGTCTTCCTCCATGGCATCCTCAG -3'
PCP013078	PpNAC3-R	5'- TCACTTGGTACTCCATCTACAACG-3'
<i>PpNAC3</i> (XhoI HindIII)	PpNAC3-F PpNAC3-R	5'-GCGCTCGAGATGTCTCCTCCATGGCATCCTCAG -3' 5'- GCGAAGCTTCACTTGGTACTCCATCTACAACG-3'
PCP013078		
<i>PpNAC3</i> (KpnI HindIII)	PpNAC3-F PpNAC3-R	5'-GCGAAGCTTATGTCTCCTCCATGGCATCCTCAG -3' 5'- GCGGGTACCTCACTTGGTACTCCATCTACAACG-
PCP013078		3'
NPTII	NPTII-F	5'-ATGATTGAACAAGATGGATTGC -3'
	NPTII-R	5'-TCAGAAGAACTCGTCAAGAAGG -3'

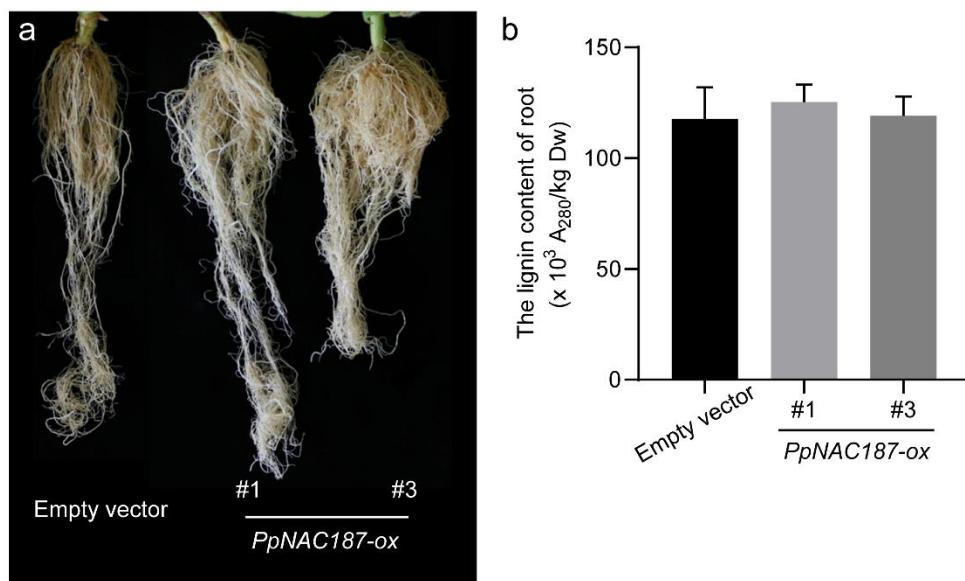


Figure S1 The morphology and lignin content of roots in *PpNAC187*-overexpressing transgenic tobacco plants.

