

# Molecular manipulation of the miR396 and miR399 Expression Modules Alters the Response of *Arabidopsis thaliana* to Phosphate Stress

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**Table S1.** The DNA oligonucleotide sequences of the stem-loop primers used for the reverse transcription of miR396- and miR399-specific cDNAs are provided below in the Table S1 (denoted by RTSL). Post synthesis of a miR396- and miR399-specific cDNA, miRNA-specific forward primers (denoted by RTF in the below Table) together with a generic reverse primer (denoted by SLR in the below table (underlined sequence of the RTSL primer identifies the binding site for the generic reverse primer)) were used to quantify miR396 and miR399 abundance. Also provided below in Table S1 is the sequence of the DNA oligonucleotide used as either the forward (denoted by RTF in the below Table) or reverse (denoted by RTR in the below Table) primer to quantify the expression of either miR396 or miR399 target genes, or a cohort of PO<sub>4</sub>-related high molecular weight RNA transcripts. The snoRNA, *snoR101*, was used to normalize miRNA abundance across the different plant lines assessed in this study. The reference gene, *UBI10* (*AT4G05320*), was used to normalize the expression of each analyzed high molecular transcript.

Targeted Sequence	Primer Name	Oligonucleotide sequence (5' to 3')
<b>DNA oligonucleotides used to quantify sRNA abundance</b>		
miR396	p396-RTSL	GTCGTAT <u>CCAGTG</u> CAGGGTCCGAGGTATT <u>CGCACTGG</u> A <u>TACGACAAGTTC</u>
	p396-RTF	GCGCGTTCCACAG <u>CTTCTTGAAC</u>
miR399	p399-RTSL	GTCGTAT <u>CCAGTG</u> CAGGGTCCGAGGTATT <u>CGCACTGG</u> A <u>TACGACCAGGGC</u>
	p399-RTF	GCATGCCAA <u>AGGGAGATTGCCCTG</u>
miRNA stem-loop oligo	pSLR-Generic	CCAGTG <u>CAGGGTCCGAGGTA</u>
snoR101	psnoR-RTF	CTTCACAGGTAA <u>AGTTCGCTTG</u>
	psnoR-RTR	AGCATCAG <u>CAGACCAGTAGTT</u>
<b>DNA oligonucleotides used to analyze gene transcript expression</b>		
<i>GRF1</i> ( <i>AT2G22840</i> )	pGRF1-RTF	CGTCGCATAAAC <u>AAGCCTCG</u>
	pGRF1-RTR	ATTCAG <u>CTCTCGGGCCAA</u>
<i>GRF2</i> ( <i>AT4G37740</i> )	pGRF2-RTF	CTTGGC <u>CTGAAGAGCTGACA</u>
	pGRF2-RTR	GTGTGTGG <u>AGGAAGGGGATG</u>
<i>GRF3</i> ( <i>AT2G36400</i> )	pGRF3-RTF	CCATAC <u>GA<u>G</u>TCCCACATCGG</u>
	pGRF3-RTR	CTGAG <u>CTCATGGGGCTTGAA</u>
<i>GRF7</i> ( <i>AT5G53660</i> )	pGRF7-RTF	CATCCCC <u>CACCGTTAGATCG</u>
	pGRF7-RTR	TGCTTCC <u>CATGCTTCCGACAT</u>

**DNA oligonucleotides used to analyze gene transcript expression (continued)**

<i>GRF8</i> ( <i>AT4G24150</i> )	<b>pGRF8-RTF</b>	GCTGCTGTGACTGTAGCAGA
	<b>pGRF8-RTR</b>	CTCATGCCATTGAGCTTCGC
<i>GRF9</i> ( <i>AT2G45480</i> )	<b>pGRF9-RTF</b>	CTCACATGAGAATGCCGGT
	<b>pGRF9-RTR</b>	ATCAGAAACTCGGGGCAGTG
<i>MIR399A</i> ( <i>AT1G29265</i> )	<b>p399A-RTF</b>	AGGGTAAGATCTCTATTGGCAGGAAAC
	<b>p399A-RTR</b>	GCAGAAGAATTACAGGGCAAATCTCC
<i>PHO2</i> ( <i>AT2G33770</i> )	<b>pPHO2-RTF</b>	ACCGTTCTCATCAAGCGT
	<b>pPHO2-RTR</b>	GTGCCCGTCCACCATAAGAA
<i>PHR1</i> ( <i>AT4G28610</i> )	<b>pPHR1-RTF</b>	AAACCAACCCGGCGATTCA
	<b>pPHR1-RTR</b>	CAGCCCATTATGCCAATCACTT
<i>PHT1;4</i> ( <i>AT2G38940</i> )	<b>pPHT1-4-RTF</b>	TGTGCCGGCCGAAATCT
	<b>pPHT1-4-RTR</b>	TTGCTCCTAATTTCTGATGCT
<i>PHT1;8</i> ( <i>AT1G20860</i> )	<b>pPHT1-8-RTF</b>	CCCGAAGTAAACCGTATGAGAA
	<b>pPHT1-8-RTR</b>	AATACTGTCACCAAGATTCCAGCAA
<i>PHT1;9</i> ( <i>AT1G76430</i> )	<b>pPHT1-9-RTF</b>	TGGAGCTGCAGGGAAGTTG
	<b>pPHT1-9-RTR</b>	ATCTGGAAAACCGTCCTCTTCAT
<i>UBI10</i> ( <i>AT4G05320</i> )	<b>pUBI10-RTF</b>	GGCCTTGTATAATCCCTGATGAATAAG
	<b>pUBI10-RTR</b>	AAAGAGATAACAGGAACGGAAACATA