

Table S1 PCR primers used in this study

Name	Sequence (5' to 3') *	RE	Note
Gcs1-F	ATGCTAGAGCTTACATTTTCGTTCC	-	amplify the full length DNA and cDNA sequence of <i>PdGcs1</i>
Gcs1-R	ATCACTGCGGACCTTGCCCACCA	-	
Gcs1-up-F	GGGGTACCTCTTTGGAATGGAGGTGATG	<i>KpnI</i>	amplify the upstream DNA sequence of <i>PdGcs1</i>
Gcs1-up-R	CGAGCTCAAGAAGAGGCATAGAGGTGG	<i>SacI</i>	
Gcs1-down-F	GACTAGTAGTGGCGTACAATTTGCTG	<i>SpeI</i>	amplify the downstream DNA sequence of <i>PdGcs1</i>
Gcs1-down-R	CCGCTCGAGTTGATGTTAAGAACGATGCTG	<i>XhoI</i>	
Gcs1-check-F1	CTGGGAGTTTGCGGTCTA	-	amplify the internal fragment of the <i>PdGcs1</i>
Gcs1-check-R1	CGCTCTTCAATCAGGGTT	-	
Gcs1-check-F2	TGTGAGACATCTTGATTGGGACT	-	amplify the upstream DNA sequence of <i>PdGcs1</i> and partial
Gcs1-check-R2	CCGCCTGGACGACTAAACC	-	<i>hph</i> gene from $\Delta PdGcs1$ mutant
Gcs1-SB-F	ATCCACGATGGCTCAACA	-	amplify the upstream DNA sequence of <i>PdGcs1</i> and used as

Gcs1-SB-R	AACCTGTCCCAAGATACCG	-	a probe for Southern blot
Gcs1-com-F	GGGGTACCTTTGGAATGGAGGTGATG	<i>KpnI</i>	amplify the <i>PdGcs1</i> coding region, its upstream and downstream sequences
Gcs1-com-R	CCCAAGCTTGCGAAGCCTACAGTGCC	<i>HindIII</i>	
Gcs1-qF	CTACTCGTCGCCCGTTCA	-	quantitative analysis of <i>PdGcs1</i> expression
Gcs1-qR	AATCACTGCGGACCTTGC	-	
β -actin-F	TCCACTACTGCCGAGCGTGAAAT	-	amplify the reference gene (β -actin) in qRT-PCR assay
β -actin-R	CCGCCAGACTCAAGACCAAGAAC	-	

RE, restriction enzyme

*Introduced restriction sites are underlined.