

The primer of qPCR

Gene	Primer(5'→3')	Sequence
<i>AtPHYA</i>	<i>AtPHYA-qPCR-F</i>	GAAGGATGCTTGGATTGGA
	<i>AtPHYA-qPCR-R</i>	CCTCAGGGAAGCTGAAACAG
<i>AtPHYB</i>	<i>AtPHYB-qPCR-F</i>	ACATAGCCCAAACCCTCTAATCC
	<i>AtPHYB-qPCR-R</i>	GCGAGACCAACCCGTAAGC
<i>AtCRY1</i>	<i>AtCRY1-qPCR-F</i>	CTCTAAGAACCGCAGAAAAGCC
	<i>AtCRY1-qPCR-R</i>	CTTTTCTCACACTCACTTCCCCA
<i>AtCRY2</i>	<i>AtCRY2-qPCR-F</i>	GCTTTGCTGTGAAGTTTCTTCTCC
	<i>AtCRY2-qPCR-R</i>	GCCTTGTAACGCGGGATTGTC
<i>AtPHOT1</i>	<i>AtPHOT1-qPCR-F</i>	CACTGATCCTAGGCTTCCCG
	<i>AtPHOT1-qPCR-R</i>	GTGGTTAGATCAGTCTCTGGACC
<i>AtPHOT2</i>	<i>AtPHOT2-qPCR-F</i>	GCTACCACTCTTGAGCGCATAGAG
	<i>AtPHOT2-qPCR-R</i>	GCTACCACTCTTGAGCGCATAGAG
<i>AtHY5</i>	<i>AtHY5-qPCR-F</i>	CCATCAAGCAGCGAGAGGTCATCAA
	<i>AtHY5-qPCR-R</i>	CGCCGATCCAGATTCTCTACCGGAA
<i>AtCOP1</i>	<i>AtCOP1-qPCR-F</i>	TGATGAACTAAATGAGGTGCAAA
	<i>AtCOP1-qPCR-R</i>	TCTGTCCCTAGCTCGGTATAAATC
<i>AtSWEET11</i>	<i>AtSWEET11-qPCR-F</i>	TCCTTCTCCTAACAACCTTATATACCAT
	<i>AtSWEET11-qPCR-R</i>	TCCTATAGAACGTTGGCACAGGA
<i>AtSWEET12</i>	<i>AtSWEET12-qPCR-F</i>	AAAGCTGATATCTTTCTTACTACTTCG
	<i>AtSWEET12-qPCR-R</i>	CTTACAAATCCTATAGAACGTTGGCAC
<i>AtSWEET15</i>	<i>AtSWEET15-qPCR-F</i>	CAATGACATATGCATAGCGATTCCAA
	<i>AtSWEET15-qPCR-R</i>	GGACTCATCACGACAATACTCTTAAG
<i>AtACTIN-8</i>	<i>AtACTIN8-qPCR-F</i>	CACCTTCCAGCAGATGTGGATC
	<i>AtACTIN8-qPCR-R</i>	AATGCCTGGACCTGCTTCAT

Genes related parameters in qPCR analysis

Gene	Sequence	Amplificon efficiency(%)	Linear correlation coefficient(R ²)
<i>AtPHYA</i>	GAAGGATGCTTGGATTGGA	98.3	0.994
	CCTCAGGGAAGCTGAAACAG		
<i>AtPHYB</i>	ACATAGCCCAAACCCTCTAATCC	97.6	0.997
	GCGAGACCAACCCGTAAGC		
<i>AtCRY1</i>	CTCTAAGAACCGCAGAAAAGCC	95.4	0.998
	CTTTTCTCACACTCACTTCCCCA		
<i>AtCRY2</i>	GCTTTGCTGTGAAGTTTCTTCTCC	100.3	0.988
	GCCTTGTAACGCGGGATTGTC		
<i>AtPHOT1</i>	CACTGATCCTAGGCTTCCCG	97.6	0.996
	GTGGTTAGATCAGTCTCTGGACC		
<i>AtPHOT2</i>	GCTACCACTCTTGAGCGCATAGAG	94.7	0.997
	GCTACCACTCTTGAGCGCATAGAG		
<i>AtHY5</i>	CCATCAAGCAGCGAGAGGTCATCAA	93.2	0.994
	CGCCGATCCAGATTCTCTACCGGAA		
<i>AtCOP1</i>	TGATGAACTAAATGAGGTGCAAA	96.7	0.984
	TCTGTCCCTAGCTCGGTATAAATC		
<i>AtSWEET11</i>	TCCTTCTCCTAACAACCTTATATACCAT	98.4	0.991
	TCCTATAGAACGTTGGCACAGGA		
<i>AtSWEET12</i>	AAAGCTGATATCTTTCTTACTACTTCG	99.4	0.984
	CTTACAAATCCTATAGAACGTTGGCAC		
<i>AtSWEET15</i>	CAATGACATATGCATAGCGATTCCAA	97.1	0.987
	GGACTCATCACGACAATACTCTTAAG		
<i>AtACTIN-8</i>	CACCTTCCAGCAGATGTGGATC	99.9	0.997
	AATGCCTGGACCTGCTTCAT		

The primer of CHIP

Gene	Primer	Sequence
<i>AtSWEET11</i>	<i>AtSWEET11-ChIP-P1-F</i>	AGCTAAAGTGAAAACGGCATAAT
	<i>AtSWEET11-ChIP-P1-R</i>	AGAAAGTGAGATTGCAAAGTGAT
<i>AtSWEET11</i>	<i>AtSWEET11-ChIP-P2-F</i>	AGGATTGGTGAAAACCCCTCAA
	<i>AtSWEET11-ChIP-P2-R</i>	ATCTCAGCTGTTTAGGCAAGC
<i>AtSWEET11</i>	<i>AtSWEET11-ChIP-P3-F</i>	GCTTGCCTAAACAGCTGAGATT
	<i>AtSWEET11-ChIP-P3-R</i>	TCACACGCTAAACCATTACCA
<i>AtSWEET11</i>	<i>AtSWEET11-ChIP-P4-F</i>	ACACAAACATTTCTCCTTTTCCA
	<i>AtSWEET11-ChIP-P4-R</i>	ACGAGCTTAGTGTTTCGGGG
<i>AtSWEET11</i>	<i>AtSWEET11-ChIP-P5-F</i>	ACATGTTTCCTTATGTTGACGC
	<i>AtSWEET11-ChIP-P5-R</i>	TCATTTGTAGTTACTTGTTGTTT
<i>AtSWEET12</i>	<i>AtSWEET12-ChIP-P1-F</i>	AACATTGATCTACTCTTGAAAACGA
	<i>AtSWEET12-ChIP-P1-R</i>	AGGTTGAACCGTCTTTCGTAAGT
<i>AtSWEET12</i>	<i>AtSWEET12-ChIP-P2-F</i>	TTGCGTACAAACGTCGTCAC
	<i>AtSWEET12-ChIP-P2-R</i>	ACTAAATTACGAGGTCCGTGCT
<i>AtSWEET12</i>	<i>AtSWEET12-ChIP-P3-F</i>	TTAGCCGTTTGCCCGTTTCT
	<i>AtSWEET12-ChIP-P3-R</i>	TGTCTATTTCTCTTTCCCTCGGT
<i>AtSWEET12</i>	<i>AtSWEET12-ChIP-P4-F</i>	CCGTTTTCACTTTTAGCCACTTTT
	<i>AtSWEET12-ChIP-P4-R</i>	AGAAACGGGCAAACGGCT
<i>AtSWEET15</i>	<i>AtSWEET15-ChIP-P1-F</i>	AGTGGAAGCGTTTGAGAGAGG
	<i>AtSWEET15-ChIP-P1-R</i>	TGCGTTACGAGAGAGAGTCG
<i>AtSWEET15</i>	<i>AtSWEET15-ChIP-P2-F</i>	TTCGACGCGTGGAGTTTTTG
	<i>AtSWEET15-ChIP-P2-R</i>	ACCATTACATCTCCTGGTCC
<i>AtSWEET15</i>	<i>AtSWEET15-ChIP-P3-F</i>	GGGTGGGACTGGTTTCATCT
	<i>AtSWEET15-ChIP-P3-R</i>	AACGGCGTCAATTTTCTGCAA
<i>AtSWEET15</i>	<i>AtSWEET15-ChIP-P4-F</i>	TGAGGAGGCTCAGGTGGTTT
	<i>AtSWEET15-ChIP-P4-R</i>	CCACTTGTCATGCAACCAGAC