

Supplementary Materials and Methods

Northern blot analysis

Probes to detect the MIR2831 spanning region:

P2831LoopS:AATGTGTTTTGTA ACTAATGCAAATGTGC

P2831LoopAS:GCACATTTTGCATTAGTTACAAAACACATT

miR2831-3P detection:miR2831-3P:a+cgc+ttc+cct+tga+cca+atc+ca.

miR165-AS:GGGGGATGAAGCCTGGTCCGA

To detect up and downstream regions of the miRNA, probes were made from PCR fragments generated using primers,

MIR2831-5'cDNAF: GTTGAGAACTTATGCAAGTTTG and MIR2831-5'cDNAR: CCATACTTGAGCAAATACCAGA to obtain 100-bp amplicon encompassing the upstream region and primers MIR2831-3'cDNAF:AAGCGTACTTGTGCAAATGC and MIR2831-3'cDNAR:CCGTCAGTCTGTAATAGCTC to obtain 100-bp fragment covering downstream region and were used to label with alpha P-32 dCTP and random primer labeling kit (Stratagene).

Bisulfite Sequence analysis of *cis* loci

Details on genomic DNA extraction and bisulfite sequencing were as described in the main paper. The following primers were used to amplify *cis* loci.

Bis-MIR2328F:GGATTTTTATGGCAAAGCTTCG

Bis-MIR2328R:CAACTTCCGATCCATTCAGAC

(13 clones from wild-type and 13 clones from *nrpd1-3* were analyzed)

Bis-MIR2883F:CTTTAGCCACTCCAAATCCA

Bis-MIR2883R:TCCAAATACAGAATCGTGGG

(15 clones from wild-type and 15 clones from *nrpd1-3* were analyzed)

Bis-MIR2831Fp-GAAATAAGACAATTTAGTTGAGAAA

Bis-MIR2831Rp-CCTCTTTAGTTACAAAACAAAACC

(15 clones from wild-type and 15 clones from *nrpd1-3* were analyzed)

Bis-MIR156a1Fp-AGATCTAACACAAAGCTTAAAAGATT

Bis-MIR156aRp- GATCGTATCTTCTTACCTTAATAT

(15 clones from wild-type and 15 clones from *nprdl-3* were analyzed)

Fig. S2

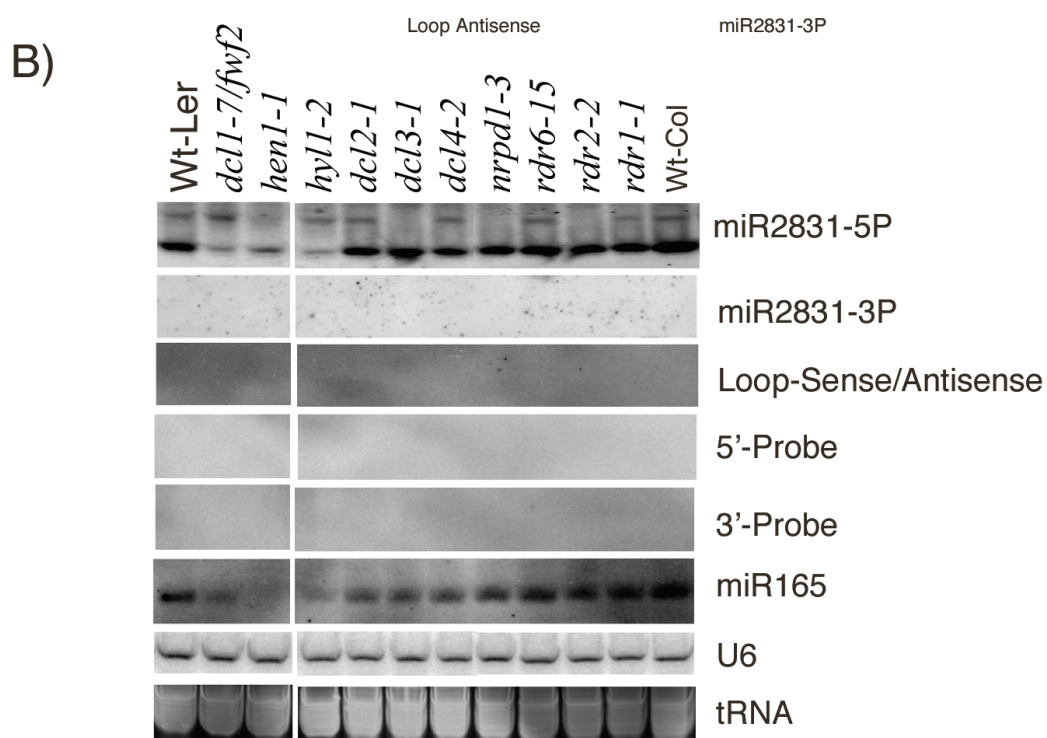
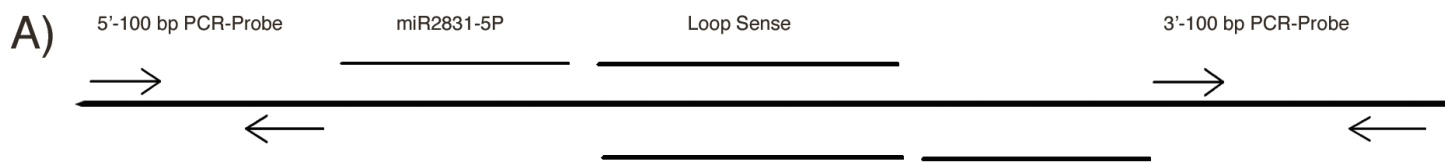


Fig. S3

A) Long siRNA cloning by 5' adapter-mediated ligation



B) Long siRNA cloning by 3' adapter-mediated ligation



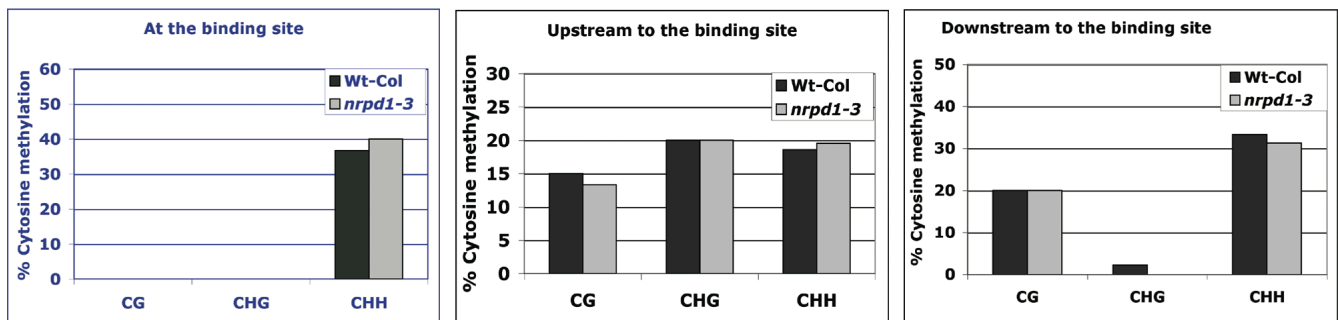
Fig. S4

A) **MIR2883-gene**

Position	-100	-96	-90	-87	-82	-76	-73	-70	-67	-64	-55	-52	-48	-39	-31	-27
Types	CG	CHH	CHG	CHH	CHH	CHH	CHH	CG	CHH	CHH	CHH	CHH	CHH	CHH	CHH	CHH
Wt	40	20	20	0	33	0	73	20	0	0	73	0	47	13	0	0
<i>nrpd1-3</i>	33	13	20	0	33	0	80	20	0	0	80	0	47	20	0	0

Position	-24	-20	-2	3	14	17	4	12	17	29	32	36	43	48	54	60
Types	CG	CHH	CG	CHH	CHH	CG	CHG	CHH	CHH	CHH	CHH	CHH	CHH	CHG	CHH	CHH
Wt	0	0	0	0	73	0	7	73	80	0	33	40	40	0	0	0
<i>nrpd1-3</i>	0	0	0	0	80	0	0	80	80	0	33	33	33	0	0	0

Position	63	77	82	85
Types	CHG	CG	CHH	CHH
Wt	0	20	20	47
<i>nrpd1-3</i>	0	20	20	33



B) MIR2328-gene

Target Site

Position	-81	-76	-61	-57	-47	-36	-33	-30	-26	-20	-18	-6	6	14	17	19
Types	CG	CHH	CHH	CHH	CHG	CHH	CHH	CHG	CG	CHH	CHH	CHH	CHH	CG	CHH	CG
Wt	0	0	0	8	0	8	0	0	0	0	8	0	0	0	0	0
<i>nRPD1-3</i>	0	0	0	0	18	9	9	18	9	9	0	0	9	18	0	9

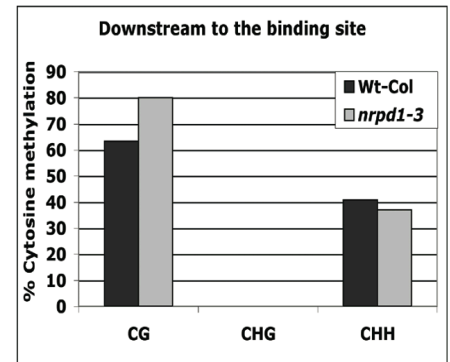
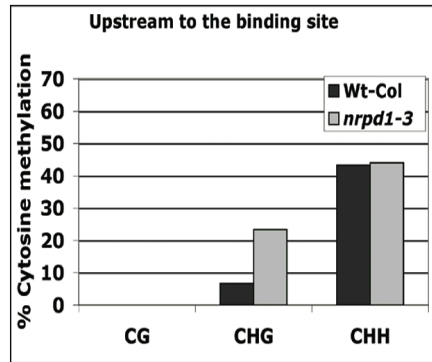
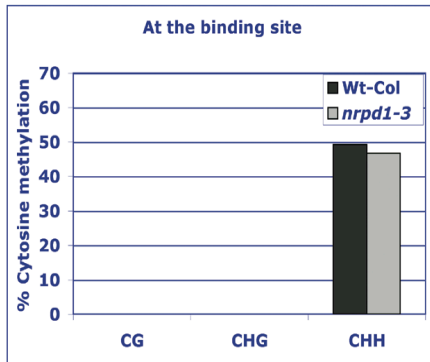
Position	2	5	13	18	24	35	41	44	51	54	57	67	73	77	95	98
Types	CHH	CHH	CHH	CHH	CHH	CG	CG	CHH	CHH	CHH	CHH	CHH	CG	CG	CHG	CHH
Wt	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
<i>nRPD1-3</i>	0	9	0	9	0	9	18	0	0	0	9	9	9	9	18	0

C) MIR2831-gene

Target Site

Position	-91	-85	-68	-64	-61	-52	-48	-43	-28	-22	-11	-9	5	10
Types	CHH	CHH	CHH	CHH	CHH	CHH	CHH	CHH	CHG	CHG	CHH	CHH	CHH	CHH
Wt	0	0	60	60	60	0	60	67	13	0	60	67	67	60
<i>nrpd1-3</i>	13	13	53	60	60	20	60	60	13	33	47	53	60	53

Position	12	15	18	15	21	30	48	57	61	67	74	77	81	87	92
Types	CHH	CHH	CHH	CHH	CHH	CHH	CHH	CG	CHH	CHH	CG	CHG	CHH	CHH	CHH
Wt	0	60	60	0	0	60	60	67	67	0	60	0	60	60	60
<i>nrpd1-3</i>	13	53	53	13	13	47	53	80	53	0	80	0	47	53	53



D) MIR156a-gene

Target Site

Position	-96	-94	-91	-86	-78	-70	-67	-58	-56	-45	-20	-11	-9	4	18
Types	CHH	CHH	CG	CHH	CHH	CHH	CHH	CHH	CHG	CHH	CHH	CG	CHH	CHG	CHH
Wt	53	40	73	53	0	7	0	13	0	0	33	0	80	33	40
<i>nrdp1-3</i>	33	33	80	33	20	7	20	33	7	33	47	13	47	60	60

Position	2	8	15	20	25	27	31	34	36	40	44	46	48
Types	CHH	CHH	CHH	CHH	CHH	CHH	CHH	CHH	CHH	CG	CHH	CHH	CHG
Wt	33	7	0	0	0	33	0	33	0	0	33	33	33
<i>nrdp1-3</i>	73	13	20	27	0	47	7	67	27	20	40	60	60

Position	51	53	57	61	67	68	73	78	80	86	90	93	97
Types	CHH	CHH	CHG	CHG	CHH	CHG	CHG	CHH	CHH	CHG	CHH	CG	CHH
Wt	7	53	87	33	33	0	0	7	53	33	87	0	0
<i>nrdp1-3</i>	20	20	53	60	60	13	20	7	13	53	53	20	27

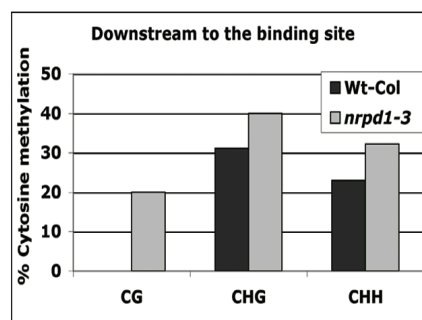
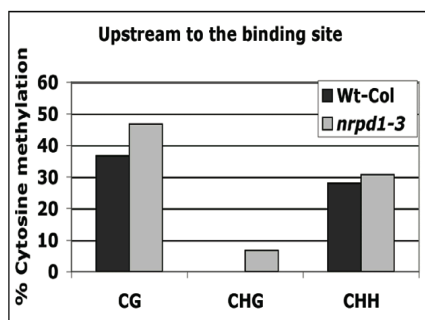
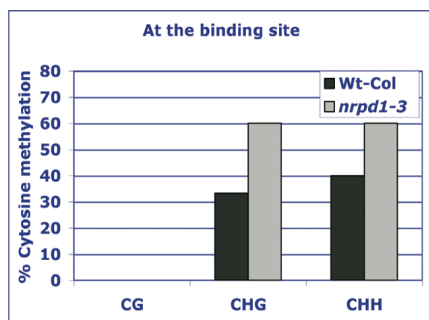


Fig. S5

```
>cand2883 >gil30698542|refINC_003075.3| Arabidopsis thaliana chromosome 4, complete sequence 2179026 2179167
AATTTCTTCAAACCTAAATATCTTAAGGACCTTCAACGGACTTGATAATAGAGATTAACGAACCTTTGATGACAAACGAAGTACAGAGGATCAAATCAAGTAGTAAACCACCTTCTAAAGACAATGCCGAATCTTGAAC
*****AACCTTTGATGACAAACGAAG*****
.....TTAACGAACCTTTGATGAC..... 53 21
.....TAACGAACCTTTGATGACAAACG..... 1 20
.....ACGAACCTTTGATGACAAACGAAG..... 1 23
.....CGAACCTTTGATGACAAACGAAG..... 1 24
.....AACTTTGATGACAAACGAAG..... 2 24
.....AACTTTGATGACAAACGAAG..... 53 21
.....CTTTGATGACAAACGAAG..... 4 22
.....TTTGTGATGACAAACGAAG..... 1 19
.....TTTGTGATGACAAACGAAG..... 6 19
.....TTTGTGATGACAAACGAAGATACA..... 1 23
.....AAGACAATGCCGAATCTTGA..... 2 20
.....AAGACAATGCCGAATCTTGA..... 38 21
.....GACAATGCCGAATCTTGAAC..... 1 20
negative: 0

>cand2328 >gil306986051|refINC_003076.4| Arabidopsis thaliana chromosome 5, complete sequence 15775278 15775419
AATCATGGAAAACAGGAATGATCCTTCAATGTTTTGTAACCTAATGCAAAATGTGCATTAGAAGTGAATGGTCAAGGGAAGCGTACTTGTGCAAAATGCGGCGAGTCAAATTCCTAAACAAGTTGGCAAGCAATCCATTTTGGT
*****AGAAACAAAATGACGACTCGG*****
.....AGAAACAAAATGACGACTCGG..... 35 21
.....AGAAACAAAATGACGACTCGGA..... 35 21
.....AGAAACAAAATGACGACTCGGA..... 1 22
.....AGAAACAAAATGACGACTCGGACA..... 1 24
.....GAAGCAAAATGACGACTCGGA..... 1 21
.....AGCAAAATGACGACTCGGACA..... 2 21
.....AAAATGACGACTCGGACAACA..... 1 21
negative: 0

>cand2831-3p >gil30698537|refINC_003074.4| Arabidopsis thaliana chromosome 3, complete sequence 6217504 6217645
TTTTCTTGGCCCATCACTTC.....
.....ATTAGAAGTGGATTGGTCAAGGGA..... 10 21
.....TTAGAAGTGGATTGGTCAAGG..... 1 21
.....TTAGAAGTGGATTGGTCAAGGGA..... 1 24
.....TAGAAGTGGATTGGTCAAGGGAAG..... 2 24
.....AGAAGTGGATTGGTCAAGGGAAG..... 1 22
.....AGTGGATTGGTCAAGGGAAGCGTA..... 5 24
.....TGGATTGGTCAAGGGAAGCG..... 2 20
.....TGGATTGGTCAAGGGAAGCGT..... 10 21
.....GGATTGGTCAAGGGAAGCGT..... 1 20
.....GGTCAAGGGAAGCGTACTTGTGC..... 2 23
.....TCAAGGGAAGCGTACTTGTGC..... 1 21
.....TCAAGGGAAGCGTACTTGTGCA..... 1 22
.....TCAAGGGAAGCGTACTTGTGCAA..... 1 23
.....CAAGGGAAGCGTACTTGTGCAA..... 1 22
.....TCCTAACAAAGTTGGCAAGC..... 1 20
.....TCCTAACAAAGTTGGCAAGCA..... 1 21
negative: 0

>cand2831-5p >gil30698537|refINC_003074.4| Arabidopsis thaliana chromosome 3, complete sequence 6217444 6217585
AAAAAGTAGCTTGCCTTCCATTTTGTAGGAACCTGATCTGATTTTGTCTCAAGTATGGTTTTCTTGGCCCATCACTTCTAATGTGTTTTGTAACCTAATGCAAAATGTGCATTAGAAGTGGATTGGTCAAGGGAAGCGT
*****TTTTCTTGGCCCATCACTTC*****
.....CTTGCATTTTGTAGGAAC..... 1 21
.....TGCCATTTTGTAGGAACCTGG..... 1 22
.....TTTTCTTGGCCCATCACTTCT..... 1 24
.....TTTTCTTGGCCCATCACTTC..... 1 21
.....ATTAGAAGTGGATTGGTCAAGGGA..... 1 24
.....TTAGAAGTGGATTGGTCAAGG..... 1 21
.....TTAGAAGTGGATTGGTCAAGGGA..... 1 24
.....TAGAAGTGGATTGGTCAAGGGAAG..... 2 24
.....AGAAGTGGATTGGTCAAGGGAAG..... 1 22
.....TGGATTGGTCAAGGGAAGCG..... 2 20
.....TGGATTGGTCAAGGGAAGCGT..... 10 21
.....GGATTGGTCAAGGGAAGCGT..... 1 20
negative: 0

>cand2812 >gil30698537|refINC_003074.4| Arabidopsis thaliana chromosome 3, complete sequence 616814 616957
ATGACAGATTGATTTGGCTCTCCATGACAATTTGCTCATGAAATCTTCTTCCATGGAGTAGATCTATGGAGAGGCACATCATTGTGCAATTGGTAAATCTGTCTGATCGTTTTTTATATGTGTTCTGCTTTTAT
*****GAGTAGATCTATGGAGAGGCACATCA*****
.....CATGGAGTAGATCTATGGAGAGGCACA..... 1 27
.....ATGGAGTAGATCTATGGAGAGG..... 1 22
.....ATGGAGTAGATCTATGGAGAGGCA..... 4 24
.....TGGAGTAGATCTATGGAGAGGCA..... 1 23
.....GGAGTAGATCTATGGAGAGGCACA..... 1 24
.....GGAGTAGATCTATGGAGAGGCACATCA..... 4 27
.....GAGTAGATCTATGGAGAGGCACAT..... 2 24
.....GAGTAGATCTATGGAGAGGCACATCA..... 15 26
.....AGTAGATCTATGGAGAGGCACATCA..... 8 25
.....GTAGATCTATGGAGAGGCACATCA..... 7 24
.....TAGATCTATGGAGAGGCACATCA..... 2 23
.....AGATCTATGGAGAGGCACATCA..... 1 22
.....GATCTATGGAGAGGCACATCA..... 11 21
.....ATCTATGGAGAGGCACATCA..... 4 20
.....TCTATGGAGAGGCACATCA..... 3 19
.....TGTGCAATTGGTAAATCTGTCTGA..... 1 24
negative: 0

>cand2010 >gil30698031|refINC_003071.3| Arabidopsis thaliana chromosome 2, complete sequence 9927138 9927280
TAAATATTTTGCACATATGAAATACAAAGTCAATCCATTTAGATGTGGTCAAAAATATCTACCTGTAATGAAAGGAAATGCAAAAGTCAATCTTGTGGATTCTTGGAAATGAAATGCAAGGAACAGATGTTCTAAT
*****TCTACCTGATTAAATGAAAGGAA*****
.....AAAATATCTACCTGATTAAATGAAAC..... 8 22
.....ATATCTACCTGATTAAATGAAAGGAA..... 1 24
.....TCTACCTGATTAAATGAAAGGAA..... 6 21
.....TCTACCTGATTAAATGAAAGGAA..... 8 22
.....CTACCTGATTAAATGAAAGGAA..... 1 20
.....CTACCTGATTAAATGAAAGGAA..... 1 21
.....TGATTAAATGAAAGGAAATGACA..... 1 21
.....ATGACAAAGTCAATCTTGTGGA..... 1 22
```

```

.....TGACAAAGTCATTCTTGTGG..... 1 20
.....TGTGGATTCCTGGAAATTGAA..... 1 22
negative: 0

```

```

>cand2011 >gil30698537|refINC_003074.4| Arabidopsis thaliana chromosome 3, complete sequence 13047958 13048102
ATAGCTTTGAGTGGCTCCAAGTGTAGAATAAGTAGGATTCCTTGTGGCTTATTTCTGCGGTACTTCAGAAAGTGTTCACCGGTAGTTCAGCGAATGTTGACTCGTAAAAACCTTTCTAGGT
*****GTGCGGTACTTCAGAAAGTAGTTC*****
.....TTTCTGCGGTACTTCAGAAAGTGA..... 2 24
.....TTCTGCGGTACTTCAGAAAGTGA..... 2 24
.....TTCTGCGGTACTTCAGAAAGTGA..... 1 23
.....TCGTGCGGTACTTCAGAAAGTGA..... 1 22
.....TCGTGCGGTACTTCAGAAAGTGA..... 1 23
.....GTGCGGTACTTCAGAAAGTAGTTC..... 2 24
negative: 0

```

```

>cand2012_star >gil30698537|refINC_003074.4| Arabidopsis thaliana chromosome 3, complete sequence 7820237 7820378
ATAAGGAATAGTTTATGTTTATAAATCTAAAAATAAAATTAATCTTATCTTACACTAATAAAAGGGGTTGTGGTAGAGAAAAACAAAATAATGTTCTTTTACTACACAACTTTTTTTTATGATT
*****TAATAAAAGGGGTTGTGGT*****
.TAAGGAATAGTTTATGTTTAT..... 3 21
.....TATCTTACACTAATAAAAGG..... 1 21
.....ACACTAATAAAAGGGGTTGTGG..... 2 21
.....ACTAATAAAAGGGGTTGTGG..... 2 24
.....ACTAATAAAAGGGGTTGTGG..... 1 21
.....ACTAATAAAAGGGGTTGTGGTA..... 3 24
.....CTAATAAAAGGGGTTGTGG..... 2 21
.....CTAATAAAAGGGGTTGTGGTA..... 2 23
.....TAATAAAAGGGGTTGTGGT..... 3 21
.....AATAAAAGGGGTTGTGGTA..... 3 21
.....ATAAAAGGGGTTGTGGTA..... 1 20
.....ATAAAAGGGGTTGTGGTAG..... 2 21
.....AAAAGGGGTTGTGGTAGAGAAA..... 1 24
.....AAAGGGGTTGTGGTAGA..... 1 19
.....AAAGGGGTTGTGGTAGAGA..... 1 21
.....AAAGGGGTTGTGGTAGAGAAA..... 1 23
.....AAGGGGTTGTGGTAGAGAAA..... 3 21
.....AGGGGTTGTGGTAGAGAAA..... 2 21
negative: 0

```

```

>cand2012 >gil30698537|refINC_003074.4| Arabidopsis thaliana chromosome 3, complete sequence 7820325 7820466
AAAAACAAAATAAGTCTTTTCTACTACACAACTTTTTTTAGATTTTTCTCTACCAAAAACCGCTTTTATTAGTGAAGAATAAAATAAATCCCTTATCTCGAATTTATAAACGTAACAACTCTTATC
.....TACCACAAAACCGCTTTTATT..... 54 21
.....TTTTCTCTACCAAAAACCGCT..... 9 24
.....TTTTCTCTACCAAAAACCGCT..... 1 22
.....TTTCTCTACCAAAAACCGCT..... 4 21
.....TTTCTCTACCAAAAACCGCT..... 2 22
.....TTCTCTACCAAAAACCGCT..... 16 21
.....TCTCTACCAAAAACCGCT..... 1 19
.....TCTCTACCAAAAACCGCT..... 1 20
.....TCTCTACCAAAAACCGCTTT..... 13 21
.....TCTCTACCAAAAACCGCTTTAT..... 3 24
.....CTCTACCAAAAACCGCT..... 1 19
.....CTCTACCAAAAACCGCTTT..... 1 20
.....CTCTACCAAAAACCGCTTTT..... 3 21
.....CTCTACCAAAAACCGCTTTTAT..... 1 23
.....CTCTACCAAAAACCGCTTTTATT..... 1 24
.....TCTACCAAAAACCGCTTT..... 1 19
.....TCTACCAAAAACCGCTTTTA..... 14 20
.....TCTACCAAAAACCGCTTTTAT..... 3 21
.....TCTACCAAAAACCGCTTTTATT..... 2 22
.....CTACCAAAAACCGCTTTA..... 1 19
.....CTACCAAAAACCGCTTTTAT..... 11 20
.....CTACCAAAAACCGCTTTTATT..... 1 22
.....TACCACAAAACCGCTTTTAT..... 1 20
.....TACCACAAAACCGCTTTTATT..... 54 21
.....TACCACAAAACCGCTTTTATTA..... 1 22
.....TACCACAAAACCGCTTTTATTAGT..... 12 24
.....ACCACAAAACCGCTTTTAT..... 1 19
.....ACCACAAAACCGCTTTTATT..... 1 20
.....ACCACAAAACCGCTTTTATTA..... 4 21
.....ACCACAAAACCGCTTTTATTAGT..... 1 25
.....CCACAAAACCGCTTTTATT..... 1 19
.....CCACAAAACCGCTTTTATTAG..... 1 21
.....CCACAAAACCGCTTTTATTAGT..... 1 24
.....AAACCGCTTTTATTAGTGA..... 1 20
.....CCGCTTTTATTAGTGAAGAA..... 6 21
negative: 0

```

```

>cand2014 >gil30698542|refINC_003075.3| Arabidopsis thaliana chromosome 4, complete sequence 6787040 6787184
AGAATTGCGTTGATCAGAAAATCAAGATATCCAACCTTGTGGAGTTTGTATTACGATGCAATCTCACCTTCTTATGCCATGACCATCACTCATAATATCTCTCAGTTATATTGCTTATGTTCTTTGTGGTGAAAA
*****AATCTCACCTTCTTATGCCAT*****
.....ATAATTATGAGTGATGGTCATGGC..... 47 24
.....AATTATGAGTGATGGTCATGG..... 1 21
.....AATTATGAGTGATGGTCATGGC..... 1 22
.....AATTATGAGTGATGGTCATGGCAT..... 1 24
.....TTATGAGTGATGGTCATGGCA..... 1 21
.....ATGAGTGATGGTCATGGCATGAAA..... 1 24
.....GAGTGATGGTCATGGCATGAAAAGA..... 1 24
.....AGTGATGGTCATGGCATGAAAAGA..... 1 23
.....AGTGATGGTCATGGCATGAAAAGA..... 1 24
.....TGGTCATGGCATGAAAAGGTTGA..... 1 24
.....ATGGCATGAAAAGGTTGAG..... 2 20
.....ATGGCATGAAAAGGTTGAGA..... 23 21
.....ATGGCATGAAAAGGTTGAGAA..... 5 22
.....ATGGCATGAAAAGGTTGAGAAAT..... 2 23
.....ATGGCATGAAAAGGTTGAGAAAT..... 47 24
.....ATGGCATGAAAAGGTTGAGAAATG..... 2 25
.....TGGCATGAAAAGGTTGAGAA..... 1 21
.....TGGCATGAAAAGGTTGAGAAATG..... 1 25
.....GGCATGAAAAGGTTGAGAA..... 2 19
.....GGCATGAAAAGGTTGAGAAAT..... 1 22
.....TGAAGAAGGTTGAGAAATGCA..... 1 21
negative: 0

```

```

>cand2018 >gil30698537|refINC_003074.4| Arabidopsis thaliana chromosome 3, complete sequence 10309268 10309406

```

```

CAATCTAAATATTAACGTTTTTCATGTGTTGGATACTTGGATATATGATGCTTAAATGATGGCCTAGTGGTAGAGTAAATAATGTAAATACTTTTTTAAACATCAAAAATAAATGATACACGATTTTTTATACT
*****TGGCCTAGTGGTAGAGTA*****
.....ATGGCCTAGTGGTAGAGTA.....
.....TGGCCTAGTGGTAGAGTA.....
negative: 0

```

36	18
4	19
36	18

```

>cand2022 >gil30698537|refINC_003074.4| Arabidopsis thaliana chromosome 3, complete sequence 7089656 7089794
TCAATAAAAACTAACTTTATGCAGCAAGTCCAATTTTGTTCGGAGCTGTAGTTAGAAAAGATAGAGAACATGTGAATTGCGTGAAGCTTCTACTTTATCGATCGAATTATAAGTCGAGATTAGGGTTTTT
*****GAAAGAAGATAGAGAACA*****
.....TAGAAGAAGATAGAGAA.....
.....GAAAGAAGATAGAGAACATG.....
.....GAAAGAAGATAGAGAACA.....
.....CTTTATGCAGCAAGTCCAATTTTGT.....
negative: 0

```

28	18
2	18
2	20
28	18
1	26

Fig. S6

<p>>ath-miR156a_MIMAT0000166_Arabidopsis_thaliana_miR156a ATCTCTGAAGTTGGACTAATGTGAATGAAAGAGTTGGGCAAGAGAAACGCAAGAAACTGACAGAAGAGAGTGGCCACAAAGGCATTTGCATATCATTGCACCTGTCTCTCTCGTGTCTCACTGCTCTTCTGTG *****TGCAGAAGAGAGTGGCCAC*****</p>		ath-miR156a	20
.....AAACTGACAGAAGAGAGTGGCCA.....		3	23
.....ACTGACAGAAGAGAGTGGCCA.....		6	21
.....ACTGACAGAAGAGAGTGGCCACA.....		12	23
.....CTGACAGAAGAGAGTGGCCA.....		4	20
.....CTGACAGAAGAGAGTGGCCAC.....		142	21
.....CTGACAGAAGAGAGTGGCCACA.....		1	22
.....TGACAGAAGAGAGTGGCC.....		68	18
.....TGACAGAAGAGAGTGGCCA.....		277	19
.....TGACAGAAGAGAGTGGCCAC.....		33405	20
.....TGACAGAAGAGAGTGGCCACA.....		1147	21
.....TGACAGAAGAGAGTGGCCACAC.....		1	22
.....GACAGAAGAGAGTGGCCA.....		30	18
.....GACAGAAGAGAGTGGCCAC.....		2329	19
.....GACAGAAGAGAGTGGCCACA.....		120	20
.....GACAGAAGAGAGTGGCCACAC.....		1	21
.....ACAGAAGAGAGTGGCCAC.....		72	18
.....ACAGAAGAGAGTGGCCACA.....		5	19
.....GAAGAGAGTGGCCACACAAG.....		1	21
<p>>ath-miR156b_MIMAT0000167_Arabidopsis_thaliana_miR156b TTTTTGAAATGATGCTAGAAGGGGAGAGATGATTGAGGAATGCAACAGAGAAACTGACAGAAGAGAGTGGCCACATGCAGGCACCTGTTATGTGTCTAACTTTCGCTGTGCTGCTCACCTCTCTTCTGTCA *****TGCAGAAGAGAGTGGCCAC*****</p>		ath-miR156b	20
.....AAACTGACAGAAGAGAGTGGCCA.....		3	23
.....ACTGACAGAAGAGAGTGGCCA.....		6	21
.....ACTGACAGAAGAGAGTGGCCACA.....		12	23
.....CTGACAGAAGAGAGTGGCCA.....		4	20
.....CTGACAGAAGAGAGTGGCCAC.....		142	21
.....CTGACAGAAGAGAGTGGCCACA.....		1	22
.....TGACAGAAGAGAGTGGCC.....		68	18
.....TGACAGAAGAGAGTGGCCA.....		277	19
.....TGACAGAAGAGAGTGGCCAC.....		33405	20
.....TGACAGAAGAGAGTGGCCACA.....		1147	21
.....TGACAGAAGAGAGTGGCCACAT.....		1	22
.....GACAGAAGAGAGTGGCCA.....		30	18
.....GACAGAAGAGAGTGGCCAC.....		2329	19
.....GACAGAAGAGAGTGGCCACA.....		120	20
.....GACAGAAGAGAGTGGCCACAT.....		1	21
.....ACAGAAGAGAGTGGCCAC.....		72	18
.....ACAGAAGAGAGTGGCCACA.....		5	19
.....TGCTCACCTCTCTTCTG.....		1	18
<p>>ath-miR156c_MIMAT0000168_Arabidopsis_thaliana_miR156c TAATGAGTGATGACTGATGAGGGAGTTTGGGCAAAATTTAAGAGAAACGATAGAAACTGACAGAAGAGAGTGGCCACAAAGGCATTTGCATGTCGATGCAATTTCTTCTTTCGCTGCTCACTGCTCTATCTG *****TGCAGAAGAGAGTGGCCAC*****</p>		ath-miR156c	20
.....AAACTGACAGAAGAGAGTGGCCA.....		3	23
.....ACTGACAGAAGAGAGTGGCCA.....		6	21
.....ACTGACAGAAGAGAGTGGCCACA.....		12	23
.....CTGACAGAAGAGAGTGGCCA.....		4	20
.....CTGACAGAAGAGAGTGGCCAC.....		142	21
.....CTGACAGAAGAGAGTGGCCACA.....		1	22
.....TGACAGAAGAGAGTGGCC.....		68	18
.....TGACAGAAGAGAGTGGCCA.....		277	19
.....TGACAGAAGAGAGTGGCCAC.....		33405	20
.....TGACAGAAGAGAGTGGCCACA.....		1147	21
.....TGACAGAAGAGAGTGGCCACAC.....		1	22
.....GACAGAAGAGAGTGGCCA.....		30	18
.....GACAGAAGAGAGTGGCCAC.....		2329	19
.....GACAGAAGAGAGTGGCCACA.....		120	20
.....GACAGAAGAGAGTGGCCACAC.....		1	21
.....ACAGAAGAGAGTGGCCAC.....		72	18
.....ACAGAAGAGAGTGGCCACA.....		5	19
.....GAAGAGAGTGGCCACACAAG.....		1	21
<p>>ath-miR156d_MIMAT0000169_Arabidopsis_thaliana_miR156d TTCTAAATATATTTAGTGTCTAATACTAGATAAATATATGTTGATGGGGAAAGAGTTGACAGAAGAGAGTGGCCACAAAGGGGAAGTTGATAAAAGTTTGTATATGTTGCTTTTTCGCTGCTCACTCTTT *****TGCAGAAGAGAGTGGCCAC*****</p>		ath-miR156d	20
.....AAAGAAGTTGACAGAAGAGA.....		1	20
.....AAGTTGACAGAAGAGAGTGG.....		6	21
.....AGTTGACAGAAGAGAGTGGCC.....		1	21
.....GTTGACAGAAGAGAGTGGCCAC.....		15	22
.....TTGACAGAAGAGAGTGG.....		11	18
.....TTGACAGAAGAGAGTGGCC.....		106	19
.....TTGACAGAAGAGAGTGGCCA.....		293	20
.....TTGACAGAAGAGAGTGGCCAC.....		32630	21
.....TTGACAGAAGAGAGTGGCCACA.....		46	22
.....TTGACAGAAGAGAGTGGCCACAC.....		6	23
.....TGACAGAAGAGAGTGGCC.....		68	18
.....TGACAGAAGAGAGTGGCCA.....		277	19
.....TGACAGAAGAGAGTGGCCAC.....		33405	20
.....TGACAGAAGAGAGTGGCCACA.....		1147	21
.....TGACAGAAGAGAGTGGCCACAC.....		1	22
.....GACAGAAGAGAGTGGCCA.....		30	18
.....GACAGAAGAGAGTGGCCAC.....		2329	19
.....GACAGAAGAGAGTGGCCACA.....		120	20
.....GACAGAAGAGAGTGGCCACAC.....		1	21
.....ACAGAAGAGAGTGGCCAC.....		72	18
.....ACAGAAGAGAGTGGCCACA.....		5	19
.....GAAGAGAGTGGCCACACAAG.....		1	21
<p>>ath-miR157a_MIMAT0000172_Arabidopsis_thaliana_miR157a TCAATCGTAAATCAAATATCGATATTTAATGTTGAGAATTGAGAGCATTGATAGTGTTCAGAGAAGATAGAGAGCACAGATGATGAGATACAATTCGGAGCATGTTCTTTCATCTACTCTTGTGCTCTAGC *****TTGACAGAAGATAGAGAGCC*****</p>		ath-miR157a	21

```

.....AATTGTTTGAGAATTGAGAGCCAT..... 1 24
.....TGAGAATTGAGAGCCATTGATAGT..... 1 24
.....GAGAGCCATTGATAGTGTGCA..... 2 23
.....ATTGATAGTGTGACAGAAGA..... 1 21
.....ATTGATAGTGTGACAGAAGATAG..... 1 24
.....TGATAGTGTGACAGAAGATAGAG..... 5 24
.....GATAGTGTGACAGAAGATAGAGA..... 2 24
.....ATAGTGTGACAGAAGATAGAGAG..... 1 24
.....AGTGTGACAGAAGATAGAGAGCA..... 3 24
.....GTGTTGACAGAAGATAGAGAGCAC..... 2 24
.....GTGTTGACAGAAGATAGAGAGCACA..... 1 25
.....TGTGACAGAAGATAGAGAGCAC..... 1 23
.....GTTGACAGAAGATAGAGAGCA..... 1 21
.....GTTGACAGAAGATAGAGAGCAC..... 4 22
.....TTGACAGAAGATAGAGAG..... 159 18
.....TTGACAGAAGATAGAGAGC..... 515 19
.....TTGACAGAAGATAGAGAGCA..... 1738 20
.....TTGACAGAAGATAGAGAGCAC..... 137693 21
.....TTGACAGAAGATAGAGAGCACA..... 355 22
.....TGACAGAAGATAGAGAGC..... 46 18
.....TGACAGAAGATAGAGAGCA..... 150 19
.....TGACAGAAGATAGAGAGCAC..... 13487 20
.....TGACAGAAGATAGAGAGCACA..... 52 21
.....GACAGAAGATAGAGAGCA..... 22 18
.....GACAGAAGATAGAGAGCAC..... 315 19
.....GACAGAAGATAGAGAGCACA..... 1 20
.....ACAGAAGATAGAGAGCAC..... 151 18
.....ACAGAAGATAGAGAGCACA..... 1 19
.....ACAGAAGATAGAGAGCACAGA..... 1 21
.....AGATAGAGAGCACAGATGATGAGA..... 1 24
.....TAGAGAGCACAGATGATGAGATA..... 1 23
.....AGAGAGCACAGATGATGAGAT..... 1 21
.....AGAGAGCACAGATGATGAGATACA..... 1 24
.....ACAGATGATGAGATACAATTCCGA..... 1 24

```

>ath-miR157b_MIMAT000173_Arabidopsis_thaliana_miR157b

```

TATATTTTCAACTGMAAATAAAATCGATTTTAAATGGTTGGAGGCATTGATAGTGTGACAGAAGATAGAGAGCACAGATGATAAGATACAATTCCTCGAGCTCTTTGCATCTTACTCCTTTGTCTCTTACG
*****TTGACAGAAGATAGAGAGCAC*****ath-miR157b 21
.....ATTGATAGTGTGACAGAAGA..... 1 21
.....ATTGATAGTGTGACAGAAGATAG..... 1 24
.....TGATAGTGTGACAGAAGATAGAG..... 5 24
.....GATAGTGTGACAGAAGATAGAGA..... 2 24
.....ATAGTGTGACAGAAGATAGAGAG..... 1 24
.....AGTGTGACAGAAGATAGAGAGCA..... 3 24
.....GTGTTGACAGAAGATAGAGAGCAC..... 2 24
.....GTGTTGACAGAAGATAGAGAGCACA..... 1 25
.....TGTGACAGAAGATAGAGAGCAC..... 1 23
.....GTTGACAGAAGATAGAGAGCA..... 1 21
.....GTTGACAGAAGATAGAGAGCAC..... 4 22
.....TTGACAGAAGATAGAGAG..... 159 18
.....TTGACAGAAGATAGAGAGC..... 515 19
.....TTGACAGAAGATAGAGAGCA..... 1738 20
.....TTGACAGAAGATAGAGAGCAC..... 137693 21
.....TTGACAGAAGATAGAGAGCACA..... 355 22
.....TGACAGAAGATAGAGAGC..... 46 18
.....TGACAGAAGATAGAGAGCA..... 150 19
.....TGACAGAAGATAGAGAGCAC..... 13487 20
.....TGACAGAAGATAGAGAGCACA..... 52 21
.....GACAGAAGATAGAGAGCA..... 22 18
.....GACAGAAGATAGAGAGCAC..... 315 19
.....GACAGAAGATAGAGAGCACA..... 1 20
.....ACAGAAGATAGAGAGCAC..... 151 18
.....ACAGAAGATAGAGAGCACA..... 1 19
.....ACAGAAGATAGAGAGCACAGA..... 1 21

```

>ath-miR157c_MIMAT000174_Arabidopsis_thaliana_miR157c

```

TACACATACATCTTATGATGTTGCATATCACACATAGTTTTGAGAGTGTGTTGTTGACAGAAGATAGAGAGCACTAAGATGACATGCAAGTACATACATATATATCATCACACCGCATGGATGATAAAATA
*****TTGACAGAAGATAGAGAGCAC*****ath-miR157c 21
.....AGAGTGTGTTGTTGTTGCA..... 1 22
.....TTGGTGTGTTGACAGAAGATAGAG..... 1 23
.....TGTGACAGAAGATAGAGAGCAC..... 1 23
.....GTTGACAGAAGATAGAGAGCAC..... 1 21
.....GTTGACAGAAGATAGAGAGCAC..... 4 22
.....TTGACAGAAGATAGAGAG..... 159 18
.....TTGACAGAAGATAGAGAGC..... 515 19
.....TTGACAGAAGATAGAGAGCA..... 1738 20
.....TTGACAGAAGATAGAGAGCAC..... 137693 21
.....TTGACAGAAGATAGAGAGCACT..... 1320 22
.....TTGACAGAAGATAGAGAGCACTA..... 240 23
.....TTGACAGAAGATAGAGAGCACTAA..... 2 24
.....TGACAGAAGATAGAGAGC..... 46 18
.....TGACAGAAGATAGAGAGCA..... 150 19
.....TGACAGAAGATAGAGAGCAC..... 13487 20
.....TGACAGAAGATAGAGAGCACT..... 188 21
.....TGACAGAAGATAGAGAGCACTA..... 65 22
.....GACAGAAGATAGAGAGCA..... 22 18
.....GACAGAAGATAGAGAGCAC..... 315 19
.....GACAGAAGATAGAGAGCACT..... 5 20
.....GACAGAAGATAGAGAGCACTA..... 4 21
.....ACAGAAGATAGAGAGCAC..... 151 18
.....ACAGAAGATAGAGAGCACT..... 1 19
.....ACAGAAGATAGAGAGCACTA..... 1 20
.....ACAGAAGATAGAGAGCACTAA..... 3 21
.....ACAGAAGATAGAGAGCACTAAGG..... 1 23
.....CAGAAGATAGAGAGCACT..... 1 18
.....CAGAAGATAGAGAGCACTAAG..... 2 21
.....AGAAGATAGAGAGCACTAAGGAT..... 4 24
.....AAGATAGAGAGCACTAAGGAT..... 1 23
.....AAGATAGAGAGCACTAAGGAT..... 2 21

```

```

>ath-miR157d_MIMAT0000175_Arabidopsis_thaliana_miR157d
ATATTATATCAAAACCGCAAGATGCTGTATGTATAGTGGAGGGTATAGTGGTTGCTGACAGAAGTAGAGAGCACTAAGGATGCTATGCAAAAACAGACAGATATGTTTCTAATTGTATTTCATACATTTAAAC
*****TGACAGAAGTAGAGAGCAC*****
.....GTGGTTGCTGACAGAAGTAGAGA.....
.....CTGACAGAAGTAGAGAG.....
.....CTGACAGAAGTAGAGAGCA.....
.....CTGACAGAAGTAGAGAGCAC.....
.....CTGACAGAAGTAGAGAGCACT.....
.....TGACAGAAGTAGAGAGC.....
.....TGACAGAAGTAGAGAGCA.....
.....TGACAGAAGTAGAGAGCAC.....
.....TGACAGAAGTAGAGAGCACT.....
.....TGACAGAAGTAGAGAGCACTA.....
.....GACAGAAGTAGAGAGCA.....
.....GACAGAAGTAGAGAGCAC.....
.....GACAGAAGTAGAGAGCACT.....
.....GACAGAAGTAGAGAGCACTA.....
.....ACAGAAGTAGAGAGCAC.....
.....ACAGAAGTAGAGAGCACT.....
.....ACAGAAGTAGAGAGCACTA.....
.....ACAGAAGTAGAGAGCACTAA.....
.....ACAGAAGTAGAGAGCACTAAGG.....
.....CAGAAGTAGAGAGCACT.....
.....CAGAAGTAGAGAGCACTAAG.....
.....CAGAAGTAGAGAGCACTAAGGAT.....
.....AGAAGTAGAGAGCACTAAGGAT.....
.....AAGTAGAGAGCACTAAGGAT.....
.....AAGTAGAGAGCACTAAGGAT.....
ath-miR157d      20
1      24
1      18
3      20
207    21
2      22
46     18
150    19
13487  20
188    21
65     22
22     18
315    19
5      20
4      21
151    18
1      19
1      20
3      21
1      23
1      18
2      21
4      24
1      23
2      21

```

```

>ath-miR158a_MIMAT0000176_Arabidopsis_thaliana_miR158a
ACGTCACTCTGTGCTTCTTTGTCTACAATTTGGAAAAGTGATGACGCCATTGCTCTTTCCAAATGTAGACAAAGCAATACCGTGATGATCGTGGAGATTTTGTGAGATGCTACGAGCGTGAATGTTTCATG
*****TCCCAAATGTAGACAAAGCA*****
.....TCTTTGTCTACAATTTGGAAA.....
.....CTTTGTCTACAATTTGGAAA.....
.....CTTTGTCTACAATTTGGAAA.....
.....CTTTGTCTACAATTTGGAAA.....
.....TTGTCTACAATTTGGAAA.....
.....TTGTCTACAATTTGGAAA.....
.....AAGTGATGACGCCATTGCTCT.....
.....AAGTGATGACGCCATTGCTCT.....
.....TCTTTCCAAATGTAGACAAA.....
.....TCTTTCCAAATGTAGACAAAGC.....
.....TCTTTCCAAATGTAGACAAAGCA.....
.....CTTTCCAAATGTAGACA.....
.....CTTTCCAAATGTAGACAAAG.....
.....TTTCCAAATGTAGACAAAGC.....
.....TTCCAAATGTAGACAAA.....
.....TTCCAAATGTAGACAAAG.....
.....TTCCAAATGTAGACAAAGC.....
.....TTCCAAATGTAGACAAAGCA.....
.....TTCCAAATGTAGACAAAGCAA.....
.....TCCCAAATGTAGACAAAG.....
.....TCCCAAATGTAGACAAAGC.....
.....TCCCAAATGTAGACAAAGCA.....
.....TCCCAAATGTAGACAAAGCA.....
.....TCCCAAATGTAGACAAAGCAAT.....
.....TCCCAAATGTAGACAAAGCAATA.....
.....CCCAAATGTAGACAAAGC.....
.....CCCAAATGTAGACAAAGCA.....
.....CCCAAATGTAGACAAAGCA.....
.....CCCAAATGTAGACAAAGCA.....
.....CCCAAATGTAGACAAAGCA.....
.....CCCAAATGTAGACAAAGCA.....
.....AATGTAGACAAAGCAATACCG.....
.....GCAATACCGTGATGATGTCGT.....
ath-miR158a      20
2      22
2      20
37     21
1      22
1      21
1      21
2      21
4      22
11     21
1      23
7      24
1      18
35     21
8      21
1      18
8      19
14     20
1714   21
2      22
490    18
809    19
99502  20
128    21
8      22
3      23
33     18
4983   19
4      20
4      20
82     18
1      19
1      21
1      21

```

```

>ath-miR160a_MIMAT0000178_Arabidopsis_thaliana_miR160a
ATAACCATGTATATGTCATGACCCATATACATATAGATGATATATATATATGATGCTGGCTCCCTGTATGCCATATGCTGAGCCATCGAGTATCGATGACCTCCGTGGATGGCGTATGAGGAGCCATGCATA
*****TGCCCTGGCTCCCTGTATGCCA*****
.....ATGCTGGCTCCCTGTATGCC.....
.....ATGCTGGCTCCCTGTATGCC.....
.....ATGCTGGCTCCCTGTATGCC.....
.....ATGCTGGCTCCCTGTATGCCA.....
.....TGCTGGCTCCCTGTATG.....
.....TGCTGGCTCCCTGTATGC.....
.....TGCTGGCTCCCTGTATGCC.....
.....TGCTGGCTCCCTGTATGCCA.....
.....TGCTGGCTCCCTGTATGCCAT.....
.....TGCTGGCTCCCTGTATGCCATA.....
.....GCCTGGCTCCCTGTATGCC.....
.....GCCTGGCTCCCTGTATGCCA.....
.....CTGGCTCCCTGTATGCCA.....
.....CTGGCTCCCTGTATGCCA.....
.....TATGCCATATGCTGAGCCATCG.....
.....ATCGATGACCTCCGTGGATG.....
.....GCGTATGAGGAGCCATGCA.....
.....GCGTATGAGGAGCCATGCAT.....
.....GCGTATGAGGAGCCATGCATA.....
.....CGTATGAGGAGCCATGCA.....
.....CGTATGAGGAGCCATGCATA.....
.....TATGAGGAGCCATGCATA.....
ath-miR160a      21
3      22
1      20
353    21
4      22
2      18
1      19
20     20
4462  21
6      22
4      23
10     19
230    20
12     19
9      18
1      23
1      20
20     19
19     20
1450   21
1      18
13     20
1      18

```

```

>ath-miR160c_MIMAT0000180_Arabidopsis_thaliana_miR160c
ATATGTCATGCTAGAGGTTTGGTATACAAATATATACATATAATAGTTTGTGCTTATGCTGGCTCCCTGTATGCCACGAGTGATACCGATTTTGGTTTAAATCGGCTGCCGGTGGCTACAAGGAGTCAAGCA
*****TGCCCTGGCTCCCTGTATGCCA*****
.....ATGCTGGCTCCCTGTATGCC.....
.....ATGCTGGCTCCCTGTATGCC.....
.....ATGCTGGCTCCCTGTATGCC.....
ath-miR160c      21
3      22
1      20
353    21

```


.....ATGCCTGGCTCCCTGTATGCCA.....	4	22
.....TGCTGGCTCCCTGTATG.....	2	18
.....TGCTGGCTCCCTGTATGC.....	1	19
.....TGCTGGCTCCCTGTATGCC.....	20	20
.....TGCTGGCTCCCTGTATGCCA.....	4462	21
.....TGCTGGCTCCCTGTATGCCAC.....	1	21
.....GCCTGGCTCCCTGTATGCC.....	10	19
.....GCCTGGCTCCCTGTATGCCA.....	230	20
.....CCTGGCTCCCTGTATGCCA.....	12	19
.....CCTGGCTCCCTGTATGCCACG.....	1	21
.....CTGGCTCCCTGTATGCCA.....	9	18
.....GCTCCCTGTATGCCACGAGTGAT.....	2	24
.....ATCGGCTGCCGGTGGCGTA.....	1	19
.....ATCGGCTGCCGGTGGCGTACAAGG.....	1	24
.....CTGCCGGTGGCGTACAAGGAGTC.....	8	23
.....CTGCCGGTGGCGTACAAGGAGTCA.....	2	24
.....TGCCGGTGGCGTACAAGGAGTC.....	1	22
.....CGGTGGCGTACAAGGAGT.....	1	18
.....TGGCGTACAAGGAGTCAAGCA.....	2	21
.....GCGTACAAGGAGTCAAGC.....	34	18
.....GCGTACAAGGAGTCAAGCA.....	156	19
.....CGTACAAGGAGTCAAGCA.....	18	18

>ath-miR161.2_MIMAT0006779_Arabidopsis_thaliana_miR161.2

AGCTTTGATCAGTACTTCTCTTTGCTTGATCTCGGTTTTTGACAGTTATTGGCTGATCAATGCATTGAAAGTACTACATCGGGTTCGGATTTTTTTGTTCTTCATATGATGAAGCGGAAACAGTAATCAACCTC			ath-miR161.2	21
*****TCAATGCATTGAAAGTACTA*****				
.....TCTCTTTGCTTGATCTCGGTT.....	1	22		
.....CTCTTTGCTTGATCTCGGTT.....	1	21		
.....ATTGCGTCGATCAATGCA.....	1	18		
.....CGATCAATGCATTGAAAGTGA.....	1	21		
.....TCAATGCATTGAAAGTGA.....	6	18		
.....TCAATGCATTGAAAGTGAC.....	92	19		
.....TCAATGCATTGAAAGTGACT.....	142	20		
.....TCAATGCATTGAAAGTGACTA.....	4564	21		
.....TCAATGCATTGAAAGTGACTAC.....	5	22		
.....CAATGCATTGAAAGTGACT.....	5	18		
.....CAATGCATTGAAAGTGACT.....	4	19		
.....CAATGCATTGAAAGTGACTA.....	186	20		
.....AATGCATTGAAAGTGACTA.....	5	19		
.....TGCATTGAAAGTGACTACA.....	1	19		
.....TGCATTGAAAGTGACTACATC.....	1	21		
.....TGCATTGAAAGTGACTACATCGGG.....	68	24		
.....TGCATTGAAAGTGACTACATCGGGG.....	1	25		
.....GCATTGAAAGTGACTACATCGGG.....	1	23		
.....CATTGAAAGTGACTACATCGG.....	7	21		
.....CATTGAAAGTGACTACATCGGGG.....	1	23		
.....ATTGAAAGTGACTACATCGGG.....	104	21		
.....ATTGAAAGTGACTACATCGGGG.....	5	22		
.....ATTGAAAGTGACTACATCGGGT.....	1	23		
.....TTGAAAGTGACTACATCG.....	27	18		
.....TTGAAAGTGACTACATCGG.....	106	19		
.....TTGAAAGTGACTACATCGGG.....	375	20		
.....TTGAAAGTGACTACATCGGGG.....	92969	21		
.....TTGAAAGTGACTACATCGGGG.....	567	22		
.....TTGAAAGTGACTACATCGGGGTT.....	90	23		
.....TTGAAAGTGACTACATCGGGGTTCC.....	17	24		
.....TGAAGTGACTACATCGG.....	104	18		
.....TGAAGTGACTACATCGGG.....	103	19		
.....TGAAGTGACTACATCGGGG.....	5891	20		
.....TGAAGTGACTACATCGGGT.....	16858	21		
.....TGAAGTGACTACATCGGGGTT.....	171	22		
.....TGAAGTGACTACATCGGGGTTCC.....	10	23		
.....TGAAGTGACTACATCGGGGTTCC.....	6	24		
.....TGAAGTGACTACATCGGGGTTCCG.....	1	25		
.....GAAAGTGACTACATCGGG.....	6	18		
.....GAAAGTGACTACATCGGGG.....	82	19		
.....GAAAGTGACTACATCGGGGTT.....	162	20		
.....GAAAGTGACTACATCGGGGTT.....	4	21		
.....AAAGTGACTACATCGGGG.....	30	18		
.....AAAGTGACTACATCGGGGTT.....	5	19		
.....AAAGTGACTACATCGGGGTTCC.....	7	21		
.....AAGTGACTACATCGGGGTT.....	7	18		
.....AAGTGACTACATCGGGGTTCC.....	1	21		
.....ATATGATGAAGCGGAAACAGT.....	1	21		

>ath-miR161.1_MIMAT0000181_Arabidopsis_thaliana_miR161.1

CAGTACTTCTCTTTGCTTGATCTCGGTTTTTGACAGTTATTGGCTGATCAATGCATTGAAAGTACTACATCGGGTTCGGATTTTTTTGTTCTTCATATGATGAAGCGGAAACAGTAATCAACCTCGTTTATGTC			ath-miR161.1	21
*****TGAAGTACTACATCGGGT*****				
.....TCTCTTTGCTTGATCTCGGTT.....	1	22		
.....CTCTTTGCTTGATCTCGGTT.....	1	21		
.....ATTGCGTCGATCAATGCA.....	1	18		
.....CGATCAATGCATTGAAAGTGA.....	1	21		
.....TCAATGCATTGAAAGTGA.....	6	18		
.....TCAATGCATTGAAAGTGAC.....	92	19		
.....TCAATGCATTGAAAGTGACT.....	142	20		
.....TCAATGCATTGAAAGTGACTA.....	4564	21		
.....TCAATGCATTGAAAGTGACTAC.....	5	22		
.....CAATGCATTGAAAGTGACT.....	5	18		
.....CAATGCATTGAAAGTGACT.....	4	19		
.....CAATGCATTGAAAGTGACTA.....	186	20		
.....AATGCATTGAAAGTGACTA.....	5	19		
.....TGCATTGAAAGTGACTACA.....	1	19		
.....TGCATTGAAAGTGACTACATC.....	1	21		
.....TGCATTGAAAGTGACTACATCGGG.....	68	24		
.....TGCATTGAAAGTGACTACATCGGGG.....	1	25		
.....GCATTGAAAGTGACTACATCGGG.....	1	23		
.....CATTGAAAGTGACTACATCGG.....	7	21		
.....CATTGAAAGTGACTACATCGGGG.....	1	23		
.....ATTGAAAGTGACTACATCGGG.....	104	21		

```

.....ATTGAAAGTACTACATCGGGG..... 5 22
.....ATTGAAAGTACTACATCGGGT..... 1 23
.....TTGAAAGTACTACATCG..... 27 18
.....TTGAAAGTACTACATCGG..... 106 19
.....TTGAAAGTACTACATCGGG..... 375 20
.....TTGAAAGTACTACATCGGGG..... 92969 21
.....TTGAAAGTACTACATCGGGT..... 567 22
.....TTGAAAGTACTACATCGGGTT..... 90 23
.....TTGAAAGTACTACATCGGGTTC..... 17 24
.....TGAAAGTACTACATCGG..... 104 18
.....TGAAAGTACTACATCGGG..... 103 19
.....TGAAAGTACTACATCGGGG..... 5891 20
.....TGAAAGTACTACATCGGGT..... 16858 21
.....TGAAAGTACTACATCGGGTT..... 171 22
.....TGAAAGTACTACATCGGGTTC..... 10 23
.....TGAAAGTACTACATCGGGTTC..... 6 24
.....TGAAAGTACTACATCGGGTTC..... 1 25
.....GAAAGTACTACATCGGG..... 6 18
.....GAAAGTACTACATCGGGG..... 82 19
.....GAAAGTACTACATCGGGT..... 162 20
.....GAAAGTACTACATCGGGTT..... 4 21
.....AAAGTACTACATCGGGG..... 30 18
.....AAAGTACTACATCGGGT..... 5 19
.....AAAGTACTACATCGGGTTC..... 7 21
.....AAAGTACTACATCGGGT..... 7 18
.....AAGTACTACATCGGGTTC..... 1 21
.....AAGTACTACATCGGGTTC..... 1 21
.....ATATGATGAAGCGAAACAGT..... 1 21

```

>ath-miR163_MIMAT0000184_Arabidopsis_thaliana_miR163

```

TAGGAAGACGACGGTCGAAAGAACTGCGCAGTGCCTAAATCGTAGATGCTAAAGTCGTTGAAGAGGACTTGAACCTCGATATTATCCCCGTGTTTGTCCAGTTCTCTATAGTTGTGCCTGAAAATATGGTTTCTA
*****TTGAAGAGGACTTGAACCTCGAT*****

```

```

24
.....AATCGTAGATGCTAAAGTCG..... 1 20
.....TTGAAGAGGACTTGAAC..... 21 18
.....TTGAAGAGGACTTGAAC..... 10 19
.....TTGAAGAGGACTTGAACCTC..... 1 21
.....TTGAAGAGGACTTGAACCTCG..... 6 22
.....TTGAAGAGGACTTGAACCTCGA..... 90 23
.....TTGAAGAGGACTTGAACCTCGAT..... 172 24
.....TGAAGAGGACTTGAACCT..... 1 18
.....TGAAGAGGACTTGAACCTCG..... 1 21
.....TGAAGAGGACTTGAACCTCGA..... 4 22
.....TGAAGAGGACTTGAACCTCGAT..... 24 23
.....TGAAGAGGACTTGAACCTCGATA..... 6 24
.....GAAAGAGGACTTGAACCTCGAT..... 1 22
.....GAAAGAGGACTTGAACCTCGATA..... 1 23
.....GAAAGAGGACTTGAACCTCGAT..... 1 24
.....AAGTCTGATATTATCCCCGTG..... 9 22
.....TATTATCCCCGTGTTTGTG..... 2 19
.....TATTATCCCCGTGTTTGTG..... 2 21
.....TATTATCCCCGTGTTTGTCC..... 2 22
.....ATTATCCCCGTGTTTGTG..... 13 18
.....ATTATCCCCGTGTTTGTG..... 6 19
.....ATTATCCCCGTGTTTGTG..... 119 20
.....ATTATCCCCGTGTTTGTCC..... 967 21
.....ATTATCCCCGTGTTTGTCCA..... 6 22
.....TTATCCCCGTGTTTGTG..... 10 19
.....TTATCCCCGTGTTTGTCC..... 80 20
.....TATCCCCGTGTTTGTG..... 3 18
.....TATCCCCGTGTTTGTCC..... 32 19
.....TATCCCCGTGTTTGTCCAG..... 5 21
.....ATCCCCGTGTTTGTCC..... 15 18
.....ATCCCCGTGTTTGTCCA..... 1 19

```

>ath-miR164a_MIMAT0000185_Arabidopsis_thaliana_miR164a

```

AAGTTCTCATACTACAACGCCCTCATGTGCTTGGAAATCGGGTGAGAACTCCATGTTGGAAGCAGGGCAGCTGCAACCAACAAACAGAAATCGTCTATTGCTTATTTGCACGTACTTAACCTCTCCAACA
*****TGGAGAAGCAGGGCAGCTGCA*****

```

```

.....TTGAGAAGCAGGGCAGCTGCA..... 1 21
.....TTGAGAAGCAGGGCAGCTGCA..... 2 22
.....TTGAGAAGCAGGGCAGCTGCA..... 24 19
.....TTGAGAAGCAGGGCAGCTGCA..... 99 20
.....TTGAGAAGCAGGGCAGCTGCA..... 14686 21
.....TTGAGAAGCAGGGCAGCTGCA..... 7 22
.....TTGAGAAGCAGGGCAGCTGCA..... 1 23
.....GGAGAAGCAGGGCAGCTGCA..... 1 18
.....GGAGAAGCAGGGCAGCTGCA..... 4 19
.....GGAGAAGCAGGGCAGCTGCA..... 495 20
.....GAGAAGCAGGGCAGCTGCA..... 5 19
.....GAGAAGCAGGGCAGCTGCA..... 4 18
.....GAGAAGCAGGGCAGCTGCA..... 2 21
.....CACGTACTTAACCTCTCCAAC.....

```

>ath-miR164b_MIMAT0000186_Arabidopsis_thaliana_miR164b

```

CTCTCATCCCGCCAGTTATGTGTTGGAGAGAAATGATGAGGTTGTGATGAGCAAGTGGAGAAGCAGGGCAGCTGCATTAAGTCTATATACACTCTCACCACAAATCGTGTATATATGCGGAATTTGTGAT
*****TGGAGAAGCAGGGCAGCTGCA*****

```

```

.....AGATGGAGAAGCAGGGCAGCT..... 1 21
.....TTGAGAAGCAGGGCAGCTGCA..... 24 19
.....TTGAGAAGCAGGGCAGCTGCA..... 99 20
.....TTGAGAAGCAGGGCAGCTGCA..... 14686 21
.....TTGAGAAGCAGGGCAGCTGCA..... 31 22
.....TTGAGAAGCAGGGCAGCTGCA..... 10 23
.....GGAGAAGCAGGGCAGCTGCA..... 1 18
.....GGAGAAGCAGGGCAGCTGCA..... 4 19
.....GGAGAAGCAGGGCAGCTGCA..... 495 20
.....GGAGAAGCAGGGCAGCTGCA..... 1 21
.....GGAGAAGCAGGGCAGCTGCA..... 2 22
.....GAGAAGCAGGGCAGCTGCA..... 5 19
.....GAGAAGCAGGGCAGCTGCA..... 4 18
.....GAGAAGCAGGGCAGCTGCA..... 2 21
.....GCAGGGCAGCTGCACTACTAG.....

```

.....CAGGGCACGTGCATTAAGC.....	1	21	
>ath-miR165a_MIMAT000187_Arabidopsis_thaliana_miR165a			
AGGATATTAGATATACATGTGTATGTTAATGATTCAAGTGATCATAGAGATATCTCGGACAGGCTTCATCCCCCAACATGTTATGCCTCTGATCACCATTATTTGTTACATTTTTTTTGTAACTACTTG			
*****TCGGACAGGCTTCATCCCC*****			ath-miR165a 21
.....TCCTGGACAGGCTTCATCC.....	1	18	
.....TCCTGGACAGGCTTCAT.....	1	19	
.....TCCTGGACAGGCTTCATCC.....	125	21	
.....CTCGGACAGGCTTCATCC.....	5	20	
.....CTCGGACAGGCTTCATCC.....	2	20	
.....CTCGGACAGGCTTCATCC.....	2	21	
.....CTCGGACAGGCTTCATCCCC.....	4	22	
.....TCGGACAGGCTTCATCC.....	234	18	
.....TCGGACAGGCTTCATCC.....	191	19	
.....TCGGACAGGCTTCATCC.....	107	20	
.....TCGGACAGGCTTCATCC.....	4725	21	
.....TCGGACAGGCTTCATCCCC.....	48	22	
.....TCGGACAGGCTTCATCCCC.....	4	23	
.....CGGACAGGCTTCATCC.....	3	18	
.....CGGACAGGCTTCATCC.....	2	19	
.....CGGACAGGCTTCATCC.....	159	20	
.....CGGACAGGCTTCATCCCC.....	3	21	
.....GGACAGGCTTCATCCCC.....	4	19	
.....GACAGGCTTCATCCCC.....	9	18	
>ath-miR166a_MIMAT000189_Arabidopsis_thaliana_miR166a			
TTCGATTAACAATCGAATTGAACCTTCAGATTCAGATTTGATTAGGTTTTAGCGTCTTCGGACAGGCTTCATCCCCCAATTGTTGCTCCCTGTTACTCCATATTTCTCTTCTTTCAAATTAGGTTTCAGA			
*****TCGGACAGGCTTCATCCCC*****			ath-miR166a 21
.....TTGATTAGGTTTTAGCGTCT.....	1	21	
.....GTCTTCGGACAGGCTTCATCC.....	1	22	
.....GTCTTCGGACAGGCTTCATCC.....	3	24	
.....TCTTCGGACAGGCTTCATT.....	1	20	
.....TCTTCGGACAGGCTTCATCC.....	2	21	
.....TCTTCGGACAGGCTTCATCC.....	1	23	
.....CTTCGGACAGGCTTCATCC.....	3	23	
.....TTGGACAGGCTTCATT.....	1	18	
.....TTGGACAGGCTTCATCC.....	22	19	
.....TTGGACAGGCTTCATCC.....	82	20	
.....TTGGACAGGCTTCATCC.....	1762	21	
.....TTGGACAGGCTTCATCC.....	1740	22	
.....TTGGACAGGCTTCATCC.....	6	23	
.....TTGGACAGGCTTCATCC.....	1	24	
.....TCGGACAGGCTTCATCC.....	152	18	
.....TCGGACAGGCTTCATCC.....	557	19	
.....TCGGACAGGCTTCATCC.....	1193	20	
.....TCGGACAGGCTTCATCC.....	60176	21	
.....TCGGACAGGCTTCATCC.....	136	22	
.....TCGGACAGGCTTCATCC.....	25	23	
.....CGGACAGGCTTCATCC.....	21	18	
.....CGGACAGGCTTCATCC.....	35	19	
.....CGGACAGGCTTCATCC.....	2138	20	
.....CGGACAGGCTTCATCC.....	4	21	
.....GGACAGGCTTCATCC.....	40	19	
.....GACAGGCTTCATCC.....	123	18	
.....ACCAGGCTTCATCCCCCAA.....	1	21	
>ath-miR166b_MIMAT000190_Arabidopsis_thaliana_miR166b			
TCTAATAACAATCTCATTGAATACATTGATCTGATGATTAGGTTTTAGTGTCTCGGACAGGCTTCATCCCCCAATTATCACTCCCTACAATCGGAATTAAACGAAGAAGATTTGCCATTTTCAACTTTT			
*****TCGGACAGGCTTCATCCCC*****			ath-miR166b 21
.....TTGATTAGGTTTTAGTGTCT.....	1	21	
.....GTGTCTCGGACAGGCTTCATCC.....	1	27	
.....CGTGGACAGGCTTCATCC.....	1	22	
.....CGTGGACAGGCTTCATCC.....	1	23	
.....GTGGACAGGCTTCATCC.....	6	21	
.....TCGGACAGGCTTCATCC.....	152	18	
.....TCGGACAGGCTTCATCC.....	557	19	
.....TCGGACAGGCTTCATCC.....	1193	20	
.....TCGGACAGGCTTCATCC.....	60176	21	
.....TCGGACAGGCTTCATCC.....	136	22	
.....TCGGACAGGCTTCATCC.....	25	23	
.....CGGACAGGCTTCATCC.....	21	18	
.....CGGACAGGCTTCATCC.....	35	19	
.....CGGACAGGCTTCATCC.....	2138	20	
.....CGGACAGGCTTCATCC.....	4	21	
.....GGACAGGCTTCATCC.....	40	19	
.....GACAGGCTTCATCC.....	123	18	
.....ACCAGGCTTCATCCCCCAA.....	1	21	
>ath-miR166c_MIMAT000191_Arabidopsis_thaliana_miR166c			
GAAGAAGAGAATCACTCGAATTAATTTGAAGAACAATTAAGAAAACCTAGATGATTCTCGGACAGGCTTCATCCCCAATCACTACTATCGCTTTTCGCCCACTTTCTTCTTAGTCTTTTGTCTAGTTTCA			
*****TCGGACAGGCTTCATCCCC*****			ath-miR166c 21
.....TCTGGACAGGCTTCATCC.....	1	21	
.....CTGGACAGGCTTCATCC.....	3	21	
.....CTGGACAGGCTTCATCC.....	8	22	
.....TCGGACAGGCTTCATCC.....	152	18	
.....TCGGACAGGCTTCATCC.....	557	19	
.....TCGGACAGGCTTCATCC.....	1193	20	
.....TCGGACAGGCTTCATCC.....	60176	21	
.....TCGGACAGGCTTCATCC.....	136	22	
.....TCGGACAGGCTTCATCC.....	1	23	
.....CGGACAGGCTTCATCC.....	21	18	
.....CGGACAGGCTTCATCC.....	35	19	
.....CGGACAGGCTTCATCC.....	2138	20	
.....CGGACAGGCTTCATCC.....	4	21	
.....GGACAGGCTTCATCC.....	40	19	
.....GACAGGCTTCATCC.....	123	18	
.....GACAGGCTTCATCC.....	123	18	

```

>ath-miR166d_MIMAT000192_Arabidopsis_thaliana_miR166d
AGGTCATGAAGAAGATCGGTAGATTGATTCATTTAAAGAGTGAAATCCCTAAATGATTCTGGACCAGGCTTCATCCCCCAACGCATATCACACTTCTACTTAATCTTTTCTTTTGTCTATCTGCTTGTAT
*****TCGGACCAGGCTTCATCCCC*****
.....TCTGGACCAGGCTTCATCCC.....
.....CTGGACCAGGCTTCATCCC.....
.....CTGGACCAGGCTTCATCCCC.....
.....TCGGACCAGGCTTCATTC.....
.....TCGGACCAGGCTTCATCCC.....
.....TCGGACCAGGCTTCATCCCC.....
.....TCGGACCAGGCTTCATCCCC.....
.....TCGGACCAGGCTTCATCCCC.....
.....CGGACCAGGCTTCATCCC.....
.....CGGACCAGGCTTCATCCC.....
.....CGGACCAGGCTTCATCCCC.....
.....CGGACCAGGCTTCATCCCC.....
.....GACCAGGCTTCATCCCC.....
.....GACCAGGCTTCATCCCC.....
.....ACCAGGCTTCATCCCCCAA.....
ath-miR166d    21
1 21
3 21
8 22
152 18
557 19
1193 20
60176 21
136 22
25 23
21 18
35 19
2138 20
4 21
40 19
123 18
1 21

```

```

>ath-miR166e_MIMAT000193_Arabidopsis_thaliana_miR166e
TATATGCTCTCTTTATCATTAGCTATACATGAATGATCTTTACGGTAAAGGTCGGACCAGGCTTCATCCCCCAATTATCGCTTCGATCTTCTCTTTGAGTAAACATCTCCAGGTAGATTGGT
*****TCGGACCAGGCTTCATCCCC*****
.....TGACGTGGACCAGGCTTCATTC.....
.....TGACGTGGACCAGGCTTCATCCC.....
.....TGACGTGGACCAGGCTTCATCCC.....
.....GACGTGGACCAGGCTTCATCCCC.....
.....ACGTGGACCAGGCTTCATTC.....
.....ACGTGGACCAGGCTTCATCCC.....
.....CGTGGACCAGGCTTCATCCC.....
.....CGTGGACCAGGCTTCATCCCC.....
.....GTCGGACCAGGCTTCATCCC.....
.....TCGGACCAGGCTTCATTC.....
.....TCGGACCAGGCTTCATCCC.....
.....TCGGACCAGGCTTCATCCC.....
.....TCGGACCAGGCTTCATCCCC.....
.....TCGGACCAGGCTTCATCCCC.....
.....TCGGACCAGGCTTCATCCCC.....
.....TCGGACCAGGCTTCATCCCC.....
.....CGGACCAGGCTTCATCCC.....
.....CGGACCAGGCTTCATCCC.....
.....CGGACCAGGCTTCATCCCC.....
.....CGGACCAGGCTTCATCCCC.....
.....GACCAGGCTTCATCCCC.....
.....GACCAGGCTTCATCCCC.....
ath-miR166e    21
1 22
3 24
1 25
1 24
1 21
1 23
1 22
1 23
6 21
152 18
557 19
1193 20
60176 21
209 22
1 23
21 18
35 19
2138 20
6 21
40 19
123 18
3 19

```

```

>ath-miR166f_MIMAT000194_Arabidopsis_thaliana_miR166f
GCCTGGCTCGAGACCATTCAATCTCATGATCTCATGATTAACGATGATGATGTCGGACCAGGCTTCATCCCCCAACTTACACGTTTGTCTCAACTTCAAGACCAATCGTTAGCGATCACCTAAATTC
*****TCGGACCAGGCTTCATCCCC*****
.....ATGTCGGACCAGGCTTCATTC.....
.....GTCGGACCAGGCTTCATCCC.....
.....TCGGACCAGGCTTCATTC.....
.....TCGGACCAGGCTTCATCCC.....
.....TCGGACCAGGCTTCATCCCC.....
.....TCGGACCAGGCTTCATCCCC.....
.....TCGGACCAGGCTTCATCCCC.....
.....CGGACCAGGCTTCATCCC.....
.....CGGACCAGGCTTCATCCC.....
.....CGGACCAGGCTTCATCCCC.....
.....CGGACCAGGCTTCATCCCC.....
.....GACCAGGCTTCATCCCC.....
.....GACCAGGCTTCATCCCC.....
ath-miR166f    21
1 21
6 21
152 18
557 19
1193 20
60176 21
209 22
1 23
21 18
35 19
2138 20
6 21
40 19
123 18
3 19

```

```

>ath-miR166g_MIMAT000195_Arabidopsis_thaliana_miR166g
TGTTGGCTCGAGGTCATGGAGAGTAATTGTTAACCCTCAAACTCTAAATGATTCTGGACCAGGCTTCATCCCCCAACTTATTTATCGGATTTTCAGAAAATCTTTTACACATTTATATCACTTCTCGATT
*****TCGGACCAGGCTTCATCCCC*****
.....TCTGGACCAGGCTTCATCCC.....
.....CTGGACCAGGCTTCATCCCC.....
.....CTGGACCAGGCTTCATCCCC.....
.....TCGGACCAGGCTTCATTC.....
.....TCGGACCAGGCTTCATCCC.....
.....TCGGACCAGGCTTCATCCCC.....
.....TCGGACCAGGCTTCATCCCC.....
.....TCGGACCAGGCTTCATCCCC.....
.....TCGGACCAGGCTTCATCCCC.....
.....CGGACCAGGCTTCATCCC.....
.....CGGACCAGGCTTCATCCC.....
.....CGGACCAGGCTTCATCCCC.....
.....CGGACCAGGCTTCATCCCC.....
.....GACCAGGCTTCATCCCC.....
.....GACCAGGCTTCATCCCC.....
ath-miR166g    21
1 21
3 21
8 22
152 18
557 19
1193 20
60176 21
209 22
1 23
21 18
35 19
2138 20
6 21
40 19
123 18
3 19

```

```

>ath-miR167a_MIMAT000196_Arabidopsis_thaliana_miR167a
AAATCTCTCTTTCTTTCTTTCTGTACTGACGGTGAAGTCTATGGTGCACCGGACTGATGAAGCTGCCAGCATGATCTAATAGCTTTCTTTATCTTGTGTGTTTCTATGACGATGGTTAAGAGATCAGTCTCGATT
*****TGAAGCTGCCAGCATGATCT*****
.....TGATGAAGCTGCCAGCATGAT.....
.....GATGAAGCTGCCAGCATGAT.....
.....ATGAAGCTGCCAGCATGAT.....
.....ATGAAGCTGCCAGCATGAT.....
.....ATGAAGCTGCCAGCATGAT.....
.....TGAAGCTGCCAGCATGAT.....
.....TGAAGCTGCCAGCATGAT.....
.....TGAAGCTGCCAGCATGAT.....
.....TGAAGCTGCCAGCATGAT.....
.....TGAAGCTGCCAGCATGAT.....
.....TGAAGCTGCCAGCATGAT.....
ath-miR167a    21
3 21
1 21
2 20
20 21
19 22
713 18
3351 19
4507 20

```

```

.....TGAAGCTGCCAGCATGATCTA.....398295 21
.....TGAAGCTGCCAGCATGATCTAA.....184 22
.....TGAAGCTGCCAGCATGATCTAAT.....1 23
.....TGAAGCTGCCAGCATGATCTAATT.....3 24
.....GAAGCTGCCAGCATGATC.....81 18
.....GAAGCTGCCAGCATGATCT.....98 19
.....GAAGCTGCCAGCATGATCTA.....9023 20
.....GAAGCTGCCAGCATGATCTAA.....5 21
.....AAGCTGCCAGCATGATCT.....2 18
.....AAGCTGCCAGCATGATCTA.....70 19
.....AAGCTGCCAGCATGATCTAAT.....3 21
.....AGCTGCCAGCATGATCTA.....22 18

```

```

>ath-miR167b_MIMAT000197_Arabidopsis_thaliana_miR167b
TGTGAGATTGACAACTGTTGCTCAGTATTTGAAGCAAGTCCACAAGGGAACAAGTGAAGCTGCCAGCATGATCTATCTTTGGTTAAGAGATGAATGTGGAAACATATTGCTTAAACCAAGTAGGTCACTGCTCT
*****TGAAGCTGCCAGCATGATCTA*****ath-miR167b 21
.....AGTGAAGCTGCCAGCATGATCTA.....2 23
.....GTGAAGCTGCCAGCATGATCTA.....19 22
.....TGAAGCTGCCAGCATGAT.....713 18
.....TGAAGCTGCCAGCATGATC.....3351 19
.....TGAAGCTGCCAGCATGATCT.....4507 20
.....TGAAGCTGCCAGCATGATCTA.....398295 21
.....TGAAGCTGCCAGCATGATCTAT.....452 22
.....TGAAGCTGCCAGCATGATCTATC.....6 23
.....TGAAGCTGCCAGCATGATCTATCT.....291 24
.....GAAGCTGCCAGCATGATC.....81 18
.....GAAGCTGCCAGCATGATCT.....98 19
.....GAAGCTGCCAGCATGATCTA.....9023 20
.....GAAGCTGCCAGCATGATCTAT.....11 21
.....GAAGCTGCCAGCATGATCTATCT.....6 23
.....AAGCTGCCAGCATGATCT.....2 18
.....AAGCTGCCAGCATGATCTA.....70 19
.....AAGCTGCCAGCATGATCTAT.....1 20
.....AGCTGCCAGCATGATCTA.....22 18

```

```

>ath-miR168a_MIMAT000198_Arabidopsis_thaliana_miR168a
CTTCATATCCCTGTCTAAAGGATTATATGATAGTAGAGTCTCACCATCGGCTCGGATTCGCTTGGTGCAGTCCGGAACTTCGGCTGACACAGCTGTGACTTTAAACCTTTATGGTTGTGACAGGAGT
*****TCGCTTGGTGCAGTCCGGAA*****ath-miR168a 21
.....ATTGCTTGGTGCAGTCCGGAA.....1 23
.....ATTGCTTGGTGCAGTCCGGAAC.....4 24
.....TTGCTTGGTGCAGTCCGGAA.....26 21
.....TTGCTTGGTGCAGTCCGGAA.....15 22
.....TTGCTTGGTGCAGTCCGGAAC.....1 23
.....TTGCTTGGTGCAGTCCGGAACT.....1 24
.....TCGCTTGGTGCAGTCCGG.....80 18
.....TCGCTTGGTGCAGTCCGG.....111 19
.....TCGCTTGGTGCAGTCCGGAA.....946 20
.....TCGCTTGGTGCAGTCCGGAA.....95711 21
.....TCGCTTGGTGCAGTCCGGAACT.....6289 22
.....TCGCTTGGTGCAGTCCGGAAC.....73 23
.....TCGCTTGGTGCAGTCCGGAACTA.....45 24
.....CGCTTGGTGCAGTCCGG.....9 18
.....CGCTTGGTGCAGTCCGGAA.....27 19
.....CGCTTGGTGCAGTCCGGAA.....3648 20
.....CGCTTGGTGCAGTCCGGAAC.....807 21
.....CGCTTGGTGCAGTCCGGAACT.....37 22
.....CGCTTGGTGCAGTCCGGAACTA.....17 23
.....CGCTTGGTGCAGTCCGGAACTAA.....3 24
.....GCTTGGTGCAGTCCGGAA.....30 19
.....GCTTGGTGCAGTCCGGAAC.....7 20
.....GCTTGGTGCAGTCCGGAAC.....1 21
.....GCTTGGTGCAGTCCGGAACTA.....1 22
.....GCTTGGTGCAGTCCGGAACTA.....1 24
.....CTTGGTGCAGTCCGGAA.....161 18
.....CTTGGTGCAGTCCGGAAC.....12 19
.....CTTGGTGCAGTCCGGAACTA.....19 21
.....TTGCTGCAGTCCGGAAC.....2 18
.....TTGCTGCAGTCCGGAAC.....1 19
.....TGGTGCAGTCCGGAACTA.....1 20
.....TGGTGCAGTCCGGAACTA.....3 21
.....TGCAGTCCGGAACTA.....1 23

```

```

>ath-miR168b_MIMAT000199_Arabidopsis_thaliana_miR168b
TCACCTTTTCTGATGAGAGAGATGCGATGATTGTTAAAGTTACCGCGCTCGGATTCGCTTGGTGCAGTCCGGAACTGATTGGCTGACACCGACAGTGTCTTGTATGGTTGGTTGTGAGCTCCCTCTTGTA
*****TCGCTTGGTGCAGTCCGGAA*****ath-miR168b 21
.....TCTCGATTGCTTGGTGCAG.....4 21
.....TCTCGATTGCTTGGTGCAGG.....1 22
.....TCTCGATTGCTTGGTGCAGGTC.....9 24
.....ATTGCTTGGTGCAGTCCGGAA.....1 23
.....ATTGCTTGGTGCAGTCCGGAAC.....4 24
.....TTGCTTGGTGCAGTCCGGAA.....26 21
.....TTGCTTGGTGCAGTCCGGAA.....15 22
.....TTGCTTGGTGCAGTCCGGAAC.....1 23
.....TCGCTTGGTGCAGTCCGG.....80 18
.....TCGCTTGGTGCAGTCCGG.....111 19
.....TCGCTTGGTGCAGTCCGGAA.....946 20
.....TCGCTTGGTGCAGTCCGGAA.....95711 21
.....TCGCTTGGTGCAGTCCGGAAC.....6289 22
.....TCGCTTGGTGCAGTCCGGAACT.....8 23
.....TCGCTTGGTGCAGTCCGGAACTG.....4 24
.....CGCTTGGTGCAGTCCGG.....9 18
.....CGCTTGGTGCAGTCCGGAA.....27 19
.....CGCTTGGTGCAGTCCGGAA.....3648 20
.....CGCTTGGTGCAGTCCGGAAC.....807 21
.....CGCTTGGTGCAGTCCGGAACT.....1 22
.....GCTTGGTGCAGTCCGGAA.....30 19
.....GCTTGGTGCAGTCCGGAAC.....7 20
.....CTTGGTGCAGTCCGGAA.....161 18

```

```

.....CTTGGTCAGGTCGGGAAC..... 12 19
.....TTGGTCAGGTCGGGAAC..... 2 18
.....GGTCAGGTCGGGAAGT..... 2 18

```

```

>ath-miR169a_MIMAT000200_Arabidopsis_thaliana_miR169a
GTTTTCATATACAAGTGGGTATAGCTAGTGAACCGCAATGTGACGAAAGTAGTGTGCAGCAGGATGACTTCCGATTAAATGATCTTCTTTATACTCTATTAAAGCAATTAGTTCAAACCTTTTTTTTTTTT
*****CAGCCAAGGATGACTTGCCGA*****
.....TACAAGTGGGTATAGCTAGTG..... ath-miR169a 21
.....TACAAGTGGGTATAGCTAGTGA..... 1 21
.....ACCGAATGTGACGAAAGTAGTGT..... 1 22
.....CGAATGTGACGAAAGTAGTGT..... 1 24
.....TGACGAAAGTAGTGTGACGCC..... 12 21
.....TGACGAAAGTAGTGTGACGCCAAG..... 3 24
.....GACGAAAGTAGTGTGACGCCA..... 1 21
.....CGAAGTAGTGTGACGCCAAG..... 3 21
.....AAGTAGTGTGACGCCAAGGAT..... 1 21
.....AGTGTGCAGCAGGATGACT..... 1 21
.....GTGTGCAGCAGGATGACTT..... 2 21
.....TGTGCAGCAGGATGACTTG..... 1 21
.....TGCAGCAGGATGACTTG..... 1 19
.....TGCAGCAGGATGACTTGC..... 2 20
.....TGCAGCAGGATGACTTGC..... 355 21
.....TGCAGCAGGATGACTTGC..... 1 22
.....TGCAGCAGGATGACTTGC..... 1 23
.....TGCAGCAGGATGACTTGC..... 1 24
.....GCAGCAGGATGACTTGC..... 9 20
.....GCAGCAGGATGACTTGC..... 41 21
.....GCAGCAGGATGACTTGC..... 1 22
.....CAGCCAAGGATGACTTGC..... 12 18
.....CAGCCAAGGATGACTTGC..... 14 19
.....CAGCCAAGGATGACTTGC..... 278 20
.....CAGCCAAGGATGACTTGC..... 12916 21
.....CAGCCAAGGATGACTTGC..... 30 22
.....CAGCCAAGGATGACTTGC..... 3 23
.....CAGCCAAGGATGACTTGC..... 1 24
.....AGCCAAGGATGACTTGC..... 28 19
.....AGCCAAGGATGACTTGC..... 478 20
.....AGCCAAGGATGACTTGC..... 18 21
.....AGCCAAGGATGACTTGC..... 1 22
.....GCCAAGGATGACTTGC..... 34 18
.....GCCAAGGATGACTTGC..... 2 19
.....CCAAGGATGACTTGC..... 124 18
.....ATGACTTCCGATTAAATGA..... 1 21
.....TTATACTCTATTAAAGCAATT..... 1 21

```

```

>ath-miR172a_MIMAT000203_Arabidopsis_thaliana_miR172a
GATTCACATCTGTGATGACGGTGGTATTCACTCTCCACAAAGTTCTCTATGAAATGAGAATCTTGATGATGCTGCATCGGCAATCAAGACTATTCTTCCCTCTCTCTCCCTCTGATAGATTATTTGGA
*****AGAATCTTGATGATGCTGCAT*****
.....TGAGAATCTTGATGATGCTGC..... ath-miR172a 21
.....TGAGAATCTTGATGATGCTGCAT..... 8 21
.....GAGAATCTTGATGATGCTGCA..... 1 23
.....GAGAATCTTGATGATGCTGCA..... 9 21
.....GAGAATCTTGATGATGCTGCAT..... 93 22
.....AGAATCTTGATGATGCTGC..... 6 18
.....AGAATCTTGATGATGCTGC..... 55 19
.....AGAATCTTGATGATGCTGC..... 905 20
.....AGAATCTTGATGATGCTGCAT..... 43240 21
.....AGAATCTTGATGATGCTGCATC..... 34 22
.....AGAATCTTGATGATGCTGCATCGG..... 1 24
.....GAATCTTGATGATGCTGC..... 37 18
.....GAATCTTGATGATGCTGCA..... 92 19
.....GAATCTTGATGATGCTGCAT..... 29 20
.....AATCTTGATGATGCTGCA..... 3 18
.....AATCTTGATGATGCTGCAT..... 138 19
.....ATCTTGATGATGCTGCAT..... 6 18
.....ATGATGCTGCATCGGCAATC..... 7 20
.....GATGCTGCATCGGCAATC..... 1 18
.....CTGCATCGGCAATCAAGACT..... 1 21

```

```

>ath-miR172b_MIMAT000205_Arabidopsis_thaliana_miR172b
CCATTAAGATTACATGAAATGATAAATACCTAAATAGGGTTTATGATGATATGAGAATCTTGATGATGCTGCATCAACATCGAGCGCTACAATACCTAAAGCTTGAGAAAGAACTGAAGATATTGATTGA
*****AGAATCTTGATGATGCTGCAT*****
.....TGAGAATCTTGATGATGCTGC..... ath-miR172b 21
.....TGAGAATCTTGATGATGCTGCAT..... 8 21
.....GAGAATCTTGATGATGCTGCA..... 1 23
.....GAGAATCTTGATGATGCTGCA..... 9 21
.....GAGAATCTTGATGATGCTGCAT..... 93 22
.....AGAATCTTGATGATGCTGC..... 6 18
.....AGAATCTTGATGATGCTGC..... 55 19
.....AGAATCTTGATGATGCTGCA..... 905 20
.....AGAATCTTGATGATGCTGCAT..... 43240 21
.....AGAATCTTGATGATGCTGCATC..... 34 22
.....AGAATCTTGATGATGCTGCATCA..... 1 23
.....GAATCTTGATGATGCTGC..... 37 18
.....GAATCTTGATGATGCTGCA..... 92 19
.....GAATCTTGATGATGCTGCAT..... 29 20
.....AATCTTGATGATGCTGCA..... 3 18
.....AATCTTGATGATGCTGCAT..... 138 19
.....ATCTTGATGATGCTGCAT..... 6 18
.....CTTGATGATGCTGCATCAACA..... 1 21
.....TCAACAATCGAGGCTACAATAC..... 1 24

```

```

>ath-miR173_MIMAT000206_Arabidopsis_thaliana_miR173
GATCTTCTCTCACAAATAACCCAAATATATCAATCTACTGTGGTATTAAAGTACTTCCGCTGCAGAGAGAAATCACAGTGGTCAAAAAGTTGAGTTTCTTAAAGTCTTCTCTCTGATTCTCTGTGAAG
*****TTCGCTGCAGAGAGAAATCAC*****
.....TTAAGTACTTCCGCTGCAGA..... ath-miR173 22
.....TTCGCTGCAGAGAGAAATCAC..... 1 21
.....TTCGCTGCAGAGAGAAA..... 2 23
.....TTCGCTGCAGAGAGAAAT..... 249 18
.....TTCGCTGCAGAGAGAAAT..... 42 19

```

.....TTGCTTGCAGAGAAATC.....	27	20
.....TTGCTTGCAGAGAAATCA.....	416	21
.....TTGCTTGCAGAGAAATCAC.....	5030	22
.....TTGCTTGCAGAGAAATCACA.....	21	23
.....TTGCTTGCAGAGAAATCACAG.....	1	24
.....TCGCTTGCAGAGAAAT.....	2	18
.....TCGCTTGCAGAGAAATCA.....	14	20
.....TCGCTTGCAGAGAAATCAC.....	217	21
.....TCGCTTGCAGAGAAATCACA.....	19	22
.....CGCTTGCAGAGAAATCAC.....	6	20
.....CGCTTGCAGAGAAATCACA.....	4	21
.....GCCTTGCAGAGAAATCAC.....	2	19
.....GCCTTGCAGAGAAATCACAG.....	12	21
.....GCCTTGCAGAGAAATCACAGT.....	2	22
.....CTTGCAGAGAAATCAC.....	27	18
.....CTTGCAGAGAAATCACAGT.....	2	21
.....TTGCAGAGAAATCACA.....	1	18
.....TTGCAGAGAAATCACAGT.....	1	21
.....TTGCAGAGAAATCACAGTGG.....	8	22
.....TTGCAGAGAAATCACAGTGGT.....	4	23
.....TGCAGAGAAATCACAGT.....	1	20
.....TGCAGAGAAATCACAGTGG.....	1	21
.....TGCAGAGAAATCACAGTGGT.....	2	22
.....TGCAGAGAAATCACAGTGGT.....	1	20
.....TCTGTGATTCTCTGTGAAG.....	1	20

>ath-miR167d_MIMAT0000905_Arabidopsis_thaliana_miR167d
TCACAAGGAGCATTCTCTCTCATTCTTTTCAATTATCTATGTTGTTTTTAGAAGCTGAAGCTGCCAGCATGATCTGGTAATCGCTACATACGACATACACACACTAAACTTCTTTATAATTTATGCACACAT
*****TGAAGCTGCCAGCATGATCTGG*****

.....AGCTGAAGCTGCCAGCATGATC.....	ath-miR167d	22
.....AGCTGAAGCTGCCAGCATGATCTGG.....	6	22
.....CTGAAGCTGCCAGCATGAT.....	1	25
.....CTGAAGCTGCCAGCATGATCT.....	1	19
.....CTGAAGCTGCCAGCATGATCT.....	2	20
.....CTGAAGCTGCCAGCATGATCT.....	1	21
.....CTGAAGCTGCCAGCATGATCTG.....	22	22
.....TGAAGCTGCCAGCATGAT.....	713	18
.....TGAAGCTGCCAGCATGATC.....	3351	19
.....TGAAGCTGCCAGCATGATCT.....	4507	20
.....TGAAGCTGCCAGCATGATCTG.....	218	21
.....TGAAGCTGCCAGCATGATCTGG.....	3221	22
.....TGAAGCTGCCAGCATGATCTGGT.....	17	23
.....TGAAGCTGCCAGCATGATCTGGTA.....	1	24
.....GAAGCTGCCAGCATGATC.....	81	18
.....GAAGCTGCCAGCATGATCT.....	98	19
.....GAAGCTGCCAGCATGATCTG.....	6	20
.....GAAGCTGCCAGCATGATCTGG.....	99	21
.....GAAGCTGCCAGCATGATCTGGT.....	2	22
.....AAGCTGCCAGCATGATCTG.....	2	18
.....AAGCTGCCAGCATGATCTGG.....	2	20
.....CTGCCAGCATGATCTGGT.....	8	18

>ath-miR169c_MIMAT0000907_Arabidopsis_thaliana_miR169c
AAGGTGTGAATGATTGTCTCATCTAAAGCTTGAATGGGAAAAGGCCATTGTTGTCAGCCAAAGGATGACTTCCGGTAGCTTGATTATGATTACTATATTGATTATATTATGGAGATGATGGTTATATAT
*****CAGCCAAAGGATGACTTCCGG*****

.....TTGAGCCAAAGGATGACTTCCG.....	ath-miR169c	21
.....CAGCCAAAGGATGACTTCCG.....	2	21
.....CAGCCAAAGGATGACTTCCG.....	12	18
.....CAGCCAAAGGATGACTTCCG.....	14	19
.....CAGCCAAAGGATGACTTCCG.....	278	20
.....CAGCCAAAGGATGACTTCCG.....	504	21
.....CAGCCAAAGGATGACTTCCG.....	89	22
.....CAGCCAAAGGATGACTTCCGGTA.....	3	23
.....AGCCAAAGGATGACTTCCG.....	28	19
.....AGCCAAAGGATGACTTCCG.....	83	20
.....AGCCAAAGGATGACTTCCG.....	27	21
.....AGCCAAAGGATGACTTCCGGTA.....	2	22
.....GCCAAAGGATGACTTCCG.....	34	18
.....GCCAAAGGATGACTTCCG.....	2	19
.....CCAAGGATGACTTCCG.....	6	18
.....CCAAGGATGACTTCCGGTA.....	1	20

>ath-miR169d_MIMAT0000908_Arabidopsis_thaliana_miR169d
GATAATGAGAGTCACTAATTGTATCATAGAGCTTGCATGGAAAAATTAAGAAATGAGATTGAGCCAAAGGATGACTTCCGGATGTTATCAACAAATCTTAAGTATTTGGTTCGGCAAGTTGACCTTGGCTCTGTTTC
*****TGAAGCCAAAGGATGACTTCCG*****

.....ATTGAGCCAAAGGATGACTTCCG.....	ath-miR169d	21
.....ATTGAGCCAAAGGATGACTTCCG.....	1	22
.....TTGAGCCAAAGGATGACTTCCG.....	1	23
.....TTGAGCCAAAGGATGACTTCCG.....	4	21
.....TTGAGCCAAAGGATGACTTCCG.....	4	22
.....TGAGCCAAAGGATGACTTCCG.....	1	18
.....TGAGCCAAAGGATGACTTCCG.....	5	20
.....TGAGCCAAAGGATGACTTCCG.....	1182	21
.....TGAGCCAAAGGATGACTTCCG.....	2	22
.....GAGCCAAAGGATGACTTCCG.....	14	20
.....GAGCCAAAGGATGACTTCCG.....	4	21
.....AGCCAAAGGATGACTTCCG.....	28	19
.....AGCCAAAGGATGACTTCCG.....	478	20
.....AGCCAAAGGATGACTTCCGAT.....	18	21
.....GCCAAAGGATGACTTCCG.....	34	18
.....GCCAAAGGATGACTTCCG.....	2	19
.....CCAAGGATGACTTCCG.....	124	18
.....CCAAGGATGACTTCCGATG.....	1	20
.....GCAAGTTGACCTTGGCTCTG.....	1	21
.....GCAAGTTGACCTTGGCTC.....	30	18
.....GCAAGTTGACCTTGGCTC.....	59	19
.....GCAAGTTGACCTTGGCTCTG.....	73	20
.....GCAAGTTGACCTTGGCTCTG.....	141	21
.....GCAAGTTGACCTTGGCTCTGTT.....	19	22
.....CAAGTTGACCTTGGCTCTG.....	2	19
.....CAAGTTGACCTTGGCTCTG.....	1	20

```

>ath-miR169e_MIMAT000909_Arabidopsis_thaliana_miR169e
ATGATGAGTACTAATAATGATCATAGAGCTTGCATGAAAAATAGAAAATGAGATTGAGCCAAGGATGACTTGCCGATTTCTCAACGAATCTTACTGATTATGGTATCCGGCAAGTTGACTTTGGCTGTGTTCC
*****TGAGCCAAGGATGACTTGCCG*****
.....ATTGAGCCAAGGATGACTTGCC.....
.....ATTGAGCCAAGGATGACTTGCCG.....
.....TTGAGCCAAGGATGACTTGCC.....
.....TTGAGCCAAGGATGACTTGCCG.....
.....TGAGCCAAGGATGACTTG.....
.....TGAGCCAAGGATGACTTGCC.....
.....TGAGCCAAGGATGACTTGCCG.....
.....TGAGCCAAGGATGACTTGCCGA.....
.....GAGCCAAGGATGACTTGCCG.....
.....GAGCCAAGGATGACTTGCCGA.....
.....AGCCAAGGATGACTTGCCG.....
.....AGCCAAGGATGACTTGCCGA.....
.....AGCCAAGGATGACTTGCCGAT.....
.....AGCCAAGGATGACTTGCCGAT.....
.....GCAAGGATGACTTGCCG.....
.....GCAAGGATGACTTGCCGA.....
.....CCAAGGATGACTTGCCGA.....
.....GCAAGTGTGCTTGGCTC.....
.....GCAAGTGTGCTTGGCTCT.....
.....GCAAGTGTGCTTGGCTCTG.....
.....GCAAGTGTGCTTGGCTCTGT.....
.....GCAAGTGTGCTTGGCTTGT.....
ath-miR169e 21
1 22
1 23
4 21
4 22
1 18
5 20
1182 21
2 22
14 20
4 21
28 19
478 20
18 21
1 22
34 18
2 19
124 18
3 18
2 19
4 20
14 21
1 22

```

```

>ath-miR169f_MIMAT000910_Arabidopsis_thaliana_miR169f
TTGTAATGGAGTCTTTGGTTGATCAGAGGCTTGCATGAAGAAATACGAATGGAATTGAGCCAAGGATGACTTGCCGGTTAAACCAACCGTTTATGACCATTGATTTGGTCTATTACAATCTGTTGATTCTGT
*****TGAGCCAAGGATGACTTGCCG*****
.....TGAAAGAAATACGAATGGA.....
.....TGAAAGAAATACGAATGGA.....
.....TGAAAGAAATACGAATGGAAT.....
.....GAAGAAATACGAATGGA.....
.....AATGGAATTGAGCCAAGGATG.....
.....ATGGAATTGAGCCAAGGATGA.....
.....ATTGAGCCAAGGATGACTTGCC.....
.....ATTGAGCCAAGGATGACTTGCCG.....
.....TTGAGCCAAGGATGACTTGCC.....
.....TTGAGCCAAGGATGACTTGCCG.....
.....TGAGCCAAGGATGACTTG.....
.....TGAGCCAAGGATGACTTGCC.....
.....TGAGCCAAGGATGACTTGCCG.....
.....TGAGCCAAGGATGACTTGCCGG.....
.....TGAGCCAAGGATGACTTGCCGGT.....
.....TGAGCCAAGGATGACTTGCCGGT.....
.....GAGCCAAGGATGACTTGCCG.....
.....GAGCCAAGGATGACTTGCCGG.....
.....AGCCAAGGATGACTTGCCG.....
.....AGCCAAGGATGACTTGCCGG.....
.....AGCCAAGGATGACTTGCCGGT.....
.....AGCCAAGGATGACTTGCCGGT.....
.....GCAAGGATGACTTGCCG.....
.....GCAAGGATGACTTGCCGG.....
.....CCAAGGATGACTTGCCGG.....
ath-miR169f 21
5 19
3 20
75 21
1 19
1 21
1 21
1 22
1 23
4 21
4 22
1 18
5 20
1182 21
1 22
1 23
6 24
14 20
2 21
28 19
83 20
27 21
9 22
34 18
2 19
6 18

```

```

>ath-miR169g_MIMAT000911_Arabidopsis_thaliana_miR169g
CGATGATGAGAGTCTTAGTTGATCAGAGGCTTGCATGAAGAAATAGAAATGAGGTTGAGCCAAGGATGACTTGCCGGTTTTTTACCAATGAATCTAATAACTGATTCTGGTGTCCGGCAAGTTGACCTGGCT
*****TGAGCCAAGGATGACTTGCCG*****
.....TTGAGCCAAGGATGACTTGCC.....
.....TTGAGCCAAGGATGACTTGCCG.....
.....TGAGCCAAGGATGACTTG.....
.....TGAGCCAAGGATGACTTGCC.....
.....TGAGCCAAGGATGACTTGCCG.....
.....TGAGCCAAGGATGACTTGCCGGT.....
.....GAGCCAAGGATGACTTGCCG.....
.....GAGCCAAGGATGACTTGCCGG.....
.....AGCCAAGGATGACTTGCCG.....
.....AGCCAAGGATGACTTGCCGG.....
.....AGCCAAGGATGACTTGCCGGG.....
.....GCAAGGATGACTTGCCG.....
.....GCAAGGATGACTTGCCGG.....
.....CCAAGGATGACTTGCCGG.....
ath-miR169g 21
4 21
4 22
1 18
5 20
1182 21
1 22
2 24
14 20
2 21
28 19
83 20
2 21
34 18
2 19
6 18

```

```

>ath-miR169h_MIMAT000913_Arabidopsis_thaliana_miR169h
TCATAAATACATAAATCATATAAGAGAAAATGGTACATGAAGAATGAGAACTTGTGTGAGCCAAGGATGACTTGCCGCTTTTACCAATATATATCAAGACTCACTGATCGATGATCTTAGAGTTGGTTGGTCCG
*****TAGCCAAGGATGACTTGCCG*****
.....GGTAGCCAAGGATGACTTGCC.....
.....GGTAGCCAAGGATGACTTGCC.....
.....GGTAGCCAAGGATGACTTGCCCT.....
.....GGTAGCCAAGGATGACTTGCCCTG.....
.....GTAGCCAAGGATGACTTGCCCT.....
.....GTAGCCAAGGATGACTTGCCCTG.....
.....TAGCCAAGGATGACTTGCC.....
.....TAGCCAAGGATGACTTGCCCT.....
.....TAGCCAAGGATGACTTGCCCTG.....
.....TAGCCAAGGATGACTTGCCCTG.....
.....AGCCAAGGATGACTTGCCCT.....
.....AGCCAAGGATGACTTGCCCTG.....
.....AGCCAAGGATGACTTGCCCTG.....
.....GCAAGGATGACTTGCCCT.....
.....GCAAGGATGACTTGCCCTG.....
.....CCAAGGATGACTTGCCCTG.....
.....CATATATATCAAGACTCACT.....
ath-miR169h 21
1 20
1 21
4 22
3 23
2 21
8 22
21 18
106 19
45 20
5086 21
23 22
6 19
49 20
2 21
1 18
11 18
1 19
1 21

```



```

>ath-miR169i_MIMAT000914_Arabidopsis_thaliana_miR169i
TGTGAGTGACACATTATTTAGAAGGAGATGTCAAAGATGAATAGAAGAATCATATTTGGTAGCCAAGGATGACTTGCCTGACTCTTGTGTAAAATGTTAGTGTCTGTTTGAAGTCACTAAGTTGTATCAAGCAAT
*****TAGCCAAGGATGACTTGCCTG*****
.....ATGAATAGAAGAATCATATTTGG.....
.....TGAATAGAAGAATCATATTTGG.....
.....GGTAGCCAAGGATGACTTGC.....
.....GGTAGCCAAGGATGACTTGC.....
.....GGTAGCCAAGGATGACTTGCCT.....
.....GGTAGCCAAGGATGACTTGCCTG.....
.....GTAGCCAAGGATGACTTGCCT.....
.....GTAGCCAAGGATGACTTGCCTG.....
.....GTAGCCAAGGATGACTTGCCTGA.....
.....TAGCCAAGGATGACTTGC.....
.....TAGCCAAGGATGACTTGCCT.....
.....TAGCCAAGGATGACTTGCCT.....
.....TAGCCAAGGATGACTTGCCTG.....
.....TAGCCAAGGATGACTTGCCTGA.....
.....TAGCCAAGGATGACTTGCCTGAC.....
.....AGCCAAGGATGACTTGCCT.....
.....AGCCAAGGATGACTTGCCTG.....
.....AGCCAAGGATGACTTGCCTGA.....
.....GCCAAGGATGACTTGCCT.....
.....GCCAAGGATGACTTGCCTGA.....
.....CCAAGGATGACTTGCCTG.....
.....CCAAGGATGACTTGCCTGA.....
.....CAAGGATGACTTGCCTGA.....
.....CAAGGATGACTTGCCTGA.....
.....CAAGGATGACTTGCCTGA.....
.....CAAGGATGACTTGCCTGA.....

ath-miR169i 21
1 23
10 22
1 20
1 21
4 22
3 23
2 21
8 22
1 23
21 18
106 19
45 20
5086 21
1092 22
6 23
6 19
49 20
13 21
1 18
1 20
11 18
4 19
1 18

```

```

>ath-miR169j_MIMAT000915_Arabidopsis_thaliana_miR169j
GAGTAATAAAGAGTATAATGAGGAAGAGGTCTAACATGGCGAAAAGAGCATGTTTAGTAGCCAAGGATGACTTGCCTGATCTTTTCACTCCATGATTTCAATTTGTAATTCATGGGTTTGGATTATTATACATCCA
*****TAGCCAAGGATGACTTGCCTG*****
.....TAATGAGGAAGAGGTCTAAC.....
.....AGTAGCCAAGGATGACTTGCCTG.....
.....GTAGCCAAGGATGACTTGCCT.....
.....GTAGCCAAGGATGACTTGCCTG.....
.....GTAGCCAAGGATGACTTGCCTGA.....
.....TAGCCAAGGATGACTTGC.....
.....TAGCCAAGGATGACTTGCCT.....
.....TAGCCAAGGATGACTTGCCT.....
.....TAGCCAAGGATGACTTGCCTG.....
.....TAGCCAAGGATGACTTGCCTGA.....
.....TAGCCAAGGATGACTTGCCTGAT.....
.....AGCCAAGGATGACTTGCCT.....
.....AGCCAAGGATGACTTGCCTG.....
.....AGCCAAGGATGACTTGCCTGA.....
.....AGCCAAGGATGACTTGCCTGAT.....
.....GCCAAGGATGACTTGCCT.....
.....GCCAAGGATGACTTGCCTGA.....
.....GCCAAGGATGACTTGCCTGAT.....
.....GCCAAGGATGACTTGCCTG.....
.....CCAAGGATGACTTGCCTG.....
.....CCAAGGATGACTTGCCTGA.....
.....CAAGGATGACTTGCCTGA.....
.....CAAGGATGACTTGCCTGA.....
.....CAAGGATGACTTGCCTGATC.....

ath-miR169j 21
1 22
1 23
2 21
8 22
1 23
21 18
106 19
45 20
5086 21
1092 22
4 23
1 25
6 19
49 20
13 21
1 22
1 18
1 20
1 22
11 18
4 19
1 18
1 20

```

```

>ath-miR169k_MIMAT000916_Arabidopsis_thaliana_miR169k
GCTGAGCTACACATTATTTAGAAGGAGATGTCAAAGATGAATAGGAGAACAATTTGGTAGCCAAGGATGACTTGCCTGCTCTGAACAAATGTCGATGCTGTTTGAAGTCACTAAGTTATACCAAGAAA
*****TAGCCAAGGATGACTTGCCTG*****
.....ATAGGAGAACAATTTGGTAG.....
.....GGTAGCCAAGGATGACTTGC.....
.....GGTAGCCAAGGATGACTTGC.....
.....GGTAGCCAAGGATGACTTGCCT.....
.....GGTAGCCAAGGATGACTTGCCTG.....
.....GTAGCCAAGGATGACTTGCCT.....
.....GTAGCCAAGGATGACTTGCCTG.....
.....TAGCCAAGGATGACTTGC.....
.....TAGCCAAGGATGACTTGCCT.....
.....TAGCCAAGGATGACTTGCCT.....
.....TAGCCAAGGATGACTTGCCTG.....
.....TAGCCAAGGATGACTTGCCT.....
.....TAGCCAAGGATGACTTGCCTG.....
.....AGCCAAGGATGACTTGCCT.....
.....AGCCAAGGATGACTTGCCTG.....
.....AGCCAAGGATGACTTGCCTGA.....
.....AGCCAAGGATGACTTGCCTGAT.....
.....GCCAAGGATGACTTGCCT.....
.....GCCAAGGATGACTTGCCTG.....
.....CCAAGGATGACTTGCCTG.....
.....CCAAGGATGACTTGCCTGA.....
.....CAAGGATGACTTGCCTG.....
.....CAAGGATGACTTGCCTG.....

ath-miR169k 21
2 22
1 20
1 21
4 22
3 23
2 21
8 22
21 18
106 19
45 20
5086 21
23 22
6 19
49 20
2 21
4 22
1 18
11 18
1 20
1 22
1 18
1 20
1 22
11 18
4 19
1 18

```

```

>ath-miR169l_MIMAT000917_Arabidopsis_thaliana_miR169l
AAAGAGAGTTAAATATAATGAAGAAGAGAGGTCTAAATGGCGAAAAGAGCATGTTTAAATAGCCAAGGATGACTTGCCTGATCTTTTCACTCCATGATTTCAATTTAAGTTCGTGGATTTGGATTATTATGCGTTTA
*****TAGCCAAGGATGACTTGCCTG*****
.....AATAGCCAAGGATGACTTGCCTG.....
.....TAGCCAAGGATGACTTGC.....
.....TAGCCAAGGATGACTTGCCT.....
.....TAGCCAAGGATGACTTGCCT.....
.....TAGCCAAGGATGACTTGCCTG.....
.....TAGCCAAGGATGACTTGCCTGA.....
.....TAGCCAAGGATGACTTGCCTGAT.....
.....TAGCCAAGGATGACTTGCCTGATCT.....
.....AGCCAAGGATGACTTGCCT.....
.....AGCCAAGGATGACTTGCCTG.....
.....AGCCAAGGATGACTTGCCTGA.....
.....AGCCAAGGATGACTTGCCTGAT.....
.....GCCAAGGATGACTTGCCT.....
.....GCCAAGGATGACTTGCCTGA.....
.....CCAAGGATGACTTGCCTG.....
.....CCAAGGATGACTTGCCTGA.....
.....CAAGGATGACTTGCCTGA.....
.....CAAGGATGACTTGCCTGA.....

ath-miR169l 21
2 23
21 18
106 19
45 20
5086 21
1092 22
4 23
1 25
6 19
49 20
13 21
1 22
1 18
1 20
1 22
11 18
4 19
1 18
1 20

```

```

.....CAAGGATGACTTGCCTGATC..... 1 20

>ath-miR169m_MIMAT000918_Arabidopsis_thaliana_miR169m
AGTGAGTGATACATTATTAGAAAGGAGAGTCAAAGATGAATAGAAGAATCATATTTGGTAGCCAAGGATGACTTGCCTGTTCTTTGAGTAAATGGGTTAGTGTCATGTTTGACAAGTGACTATAAGTTATATCAAGC
*****TAGCCAAGGATGACTTGCCTG*****
.....ATGAATAGAAGAATCATATTTGG..... 1 23
.....TGAATAGAAGAATCATATTTGG..... 10 22
.....GGTAGCCAAGGATGACTTGC..... 1 20
.....GGTAGCCAAGGATGACTTGC..... 1 21
.....GGTAGCCAAGGATGACTTGCCT..... 4 22
.....GGTAGCCAAGGATGACTTGCCTG..... 3 23
.....GTAGCCAAGGATGACTTGCCT..... 2 21
.....GTAGCCAAGGATGACTTGCCTG..... 8 22
.....TAGCCAAGGATGACTTGC..... 21 18
.....TAGCCAAGGATGACTTGCCT..... 106 19
.....TAGCCAAGGATGACTTGCCT..... 45 20
.....TAGCCAAGGATGACTTGCCTG..... 5086 21
.....TAGCCAAGGATGACTTGCCTGT..... 177 22
.....TAGCCAAGGATGACTTGCCTGTT..... 1 23
.....AGCCAAGGATGACTTGCCT..... 6 19
.....AGCCAAGGATGACTTGCCTG..... 49 20
.....AGCCAAGGATGACTTGCCTGT..... 2 21
.....GCCAAGGATGACTTGCCT..... 1 18
.....CCAAGGATGACTTGCCTG..... 11 18
.....ATGTTTGACAAGTGACTATAAGTTAT..... 1 26

>ath-miR169n_MIMAT000919_Arabidopsis_thaliana_miR169n
GAGTAATGAAGTGTATGATGAAGAAGAGAGTCTAACATGGCGGAAAGCGTCATGTTTAGTAGCCAAGGATGACTTGCCTGATCTTTTCGCCCTCCACGATTCAATTTCAAATTCATGCATTTTGATTATTATACCTTTT
*****TAGCCAAGGATGACTTGCCTG*****
.....AGAAGAGAGGCTAACATGG..... 1 20
.....GAGGTCTAACATGGCGGAAA..... 1 19
.....AGGTCTAACATGGCGGAAA..... 1 19
.....TGGCGGAAAGCGTCATGTT..... 1 20
.....TGGCGGAAAGCGTCATGTTAG..... 5 22
.....AGCGTCATGTTAGTAGCCAAGGA..... 1 24
.....AGTAGCCAAGGATGACTTGCCTG..... 1 23
.....GTAGCCAAGGATGACTTGCCT..... 2 21
.....GTAGCCAAGGATGACTTGCCTG..... 8 22
.....GTAGCCAAGGATGACTTGCCTGA..... 1 23
.....TAGCCAAGGATGACTTGC..... 21 18
.....TAGCCAAGGATGACTTGCCT..... 106 19
.....TAGCCAAGGATGACTTGCCT..... 45 20
.....TAGCCAAGGATGACTTGCCTG..... 5086 21
.....TAGCCAAGGATGACTTGCCTGA..... 1092 22
.....TAGCCAAGGATGACTTGCCTGAT..... 4 23
.....TAGCCAAGGATGACTTGCCTGATCT..... 1 25
.....AGCCAAGGATGACTTGCCT..... 6 19
.....AGCCAAGGATGACTTGCCTG..... 49 20
.....AGCCAAGGATGACTTGCCTGA..... 13 21
.....AGCCAAGGATGACTTGCCTGAT..... 1 22
.....GCCAAGGATGACTTGCCT..... 1 18
.....GCCAAGGATGACTTGCCTGA..... 1 20
.....GCCAAGGATGACTTGCCTGATC..... 1 22
.....CCAAGGATGACTTGCCTG..... 11 18
.....CCAAGGATGACTTGCCTGA..... 4 19
.....CAAGGATGACTTGCCTGA..... 1 18
.....CAAGGATGACTTGCCTGATC..... 1 20

>ath-miR171b_MIMAT000920_Arabidopsis_thaliana_miR171b
TATTAGTGGCGTTCAATCAAAATAGTCCTCTTAACCTATGGAGAACGGTGTGTTGATTGAGCCGTGCCAATATCACCGGTAACCAAAAATGGCAAGATAGTATTATAACCTAAAGGATGTATCATTTATCGT
*****TTGAGCCGTGCCAATATCACG*****
.....ATTAGTGGCGTTCAATCAAAAT..... 1 21
.....GATTGAGCCGTGCCAATATC..... 1 20
.....ATTGAGCCGTGCCAATATCAC..... 1 21
.....TTGAGCCGTGCCAATATC..... 5 18
.....TTGAGCCGTGCCAATATCA..... 23 19
.....TTGAGCCGTGCCAATATCAC..... 420 20
.....TTGAGCCGTGCCAATATCACG..... 513 21
.....TTGAGCCGTGCCAATATCACGC..... 8 22
.....TTGAGCCGTGCCAATATCACGG..... 1 23
.....TGAGCCGTGCCAATATCA..... 1 18
.....TGAGCCGTGCCAATATCAC..... 5 19
.....TGAGCCGTGCCAATATCACG..... 33 20
.....TGAGCCGTGCCAATATCACGC..... 1 21
.....GAGCCGTGCCAATATCAC..... 1 18

>ath-miR171c_MIMAT000921_Arabidopsis_thaliana_miR171c
ATATTGGTGGCGTTCAATCAGAAAACCGTACTCTTTGTTTAAAGATCGGTTTATTGATTGAGCCGTGCCAATATCACCGGTTTAAATAGTTTAAAGATTCTATGTTAGTTGATGTATCAATCAAGTATGATCAT
*****TTGAGCCGTGCCAATATCACG*****
ATATTGGTGGCGTTCAATC.....TTTATTGATTGAGCCGTGCC..... 3 19
.....TTTATTGATTGAGCCGTGCC..... 1 21
.....TGATTGAGCCGTGCCAATA..... 6 19
.....TGATTGAGCCGTGCCAATAT..... 1 20
.....TGATTGAGCCGTGCCAATATC..... 47 21
.....GATTGAGCCGTGCCAATATC..... 1 20
.....ATTGAGCCGTGCCAATATCAC..... 1 21
.....TTGAGCCGTGCCAATATC..... 5 18
.....TTGAGCCGTGCCAATATCA..... 23 19
.....TTGAGCCGTGCCAATATCAC..... 420 20
.....TTGAGCCGTGCCAATATCACG..... 513 21
.....TTGAGCCGTGCCAATATCACGC..... 8 22
.....TTGAGCCGTGCCAATATCACGG..... 1 23
.....TGAGCCGTGCCAATATCA..... 1 18
.....TGAGCCGTGCCAATATCAC..... 5 19
.....TGAGCCGTGCCAATATCACG..... 33 20
.....TGAGCCGTGCCAATATCACGC..... 1 21
.....GAGCCGTGCCAATATCAC..... 1 18

```

>ath-miR172d_MIMAT000923_Arabidopsis_thaliana_miR172d
CAAGATTAGAAATCAGATTCTTATGGGTTTCCTTTGAGCCCTTATTTTTGGTTTGAGAATCTTGATGATGCTGACGGCAATTAATGGCTTACTTATCTAGGGCTTTTTTCCATTTTCATGTTGTTAAT
*****AGAACTCTGATGATGCTGCAG*****
.....TGAAATCTTGATGATGCTGC..... 8 21
.....GAAATCTTGATGATGCTGC..... 9 21
.....AGAATCTTGATGATGCTGC..... 6 18
.....AGAATCTTGATGATGCTGC..... 55 19
.....AGAATCTTGATGATGCTGC..... 905 20
.....AGAATCTTGATGATGCTGCAG..... 25 21
.....GAATCTTGATGATGCTGC..... 37 18
.....GAATCTTGATGATGCTGC..... 92 19
.....AATCTTGATGATGCTGC..... 3 18
.....ATCTTGATGATGCTGCAGCGCA..... 1 23
.....CTTGATGATGCTGCAGCGCA..... 1 21
.....GATGATGCTGCAGCGCAATTA..... 1 23
.....GATGCTGCAGCGCAATTAATGG..... 1 24
.....GCTGCAGCGCAATTAATGG..... 1 21
.....AGCGCAATTAATGGCTTACTTA..... 1 24
.....AATGGCTTACTTATCTAGGGCTT..... 1 24

>ath-miR390a_MIMAT000931_Arabidopsis_thaliana_miR390a
AATCGGTTTTATCTTCTAAGTCAACCCAAAAAACAAGTAGAGAAGATCTGTAAGCTCAGGAGGATAGCGCCATGATGATCACATTGTTATCTATTTTTGGCGCTATCCATCCTGAGTTTCATTGGCTCT
*****AAGCTCAGGAGGATAGCGCC*****
.....AGAACTGTAAGCTCAGGAGGA..... 1 24
.....ATCTGTAAGCTCAGGAGGA..... 2 21
.....TGTAAGCTCAGGAGGATAG..... 5 21
.....GTAAGCTCAGGAGGATAG..... 1 20
.....TAAAGCTCAGGAGGATAG..... 1 19
.....AAAGCTCAGGAGGATAGCG..... 1 20
.....AAAGCTCAGGAGGATAGCGCC..... 27 21
.....AAAGCTCAGGAGGATAGCGCC..... 9 22
.....AAAGCTCAGGAGGATAGCGCCATG..... 1 25
.....AAGCTCAGGAGGATAGCG..... 6 18
.....AAGCTCAGGAGGATAGCG..... 42 19
.....AAGCTCAGGAGGATAGCGCC..... 100 20
.....AAGCTCAGGAGGATAGCGCC..... 5411 21
.....AAGCTCAGGAGGATAGCGCCA..... 38 22
.....AAGCTCAGGAGGATAGCGCCAT..... 1 23
.....AAGCTCAGGAGGATAGCGCCATG..... 10 24
.....AGCTCAGGAGGATAGCG..... 1 18
.....AGCTCAGGAGGATAGCGCC..... 13 19
.....AGCTCAGGAGGATAGCGCC..... 114 20
.....AGCTCAGGAGGATAGCGCCA..... 272 21
.....GCTCAGGAGGATAGCGCC..... 2 19
.....CTCAGGAGGATAGCGCC..... 3 18
.....CTCAGGAGGATAGCGCCA..... 7 19
.....CTCAGGAGGATAGCGCCATG..... 5 21
.....TCAGGAGGATAGCGCCATGA..... 1 21
.....CGCCATGATGATCACATTG..... 1 20
.....CGCTATCCATCCTGAGTTTC..... 23 20
.....CGCTATCCATCCTGAGTTCA..... 80 21
.....CTATCCATCCTGAGTTCA..... 1 19

>ath-miR390b_MIMAT000932_Arabidopsis_thaliana_miR390b
AAAGGAAGATGATACCTATGGATGTAATTTAGATTGAGTAGAGAAATAGCTATAAAGCTCAGGAGGATAGCGCCATGGCTCACCAGTGTGATGTTTTGTATATGCGTACATGTATATCTGTTGGCGCTATCC
*****AAGCTCAGGAGGATAGCGCC*****
.....TATAAAGCTCAGGAGGATAG..... 1 21
.....TAAAGCTCAGGAGGATAG..... 1 19
.....AAAGCTCAGGAGGATAGCG..... 1 20
.....AAAGCTCAGGAGGATAGCGCC..... 27 21
.....AAAGCTCAGGAGGATAGCGCC..... 9 22
.....AAAGCTCAGGAGGATAGCGCCATG..... 1 25
.....AAGCTCAGGAGGATAGCG..... 6 18
.....AAGCTCAGGAGGATAGCG..... 42 19
.....AAGCTCAGGAGGATAGCGCC..... 100 20
.....AAGCTCAGGAGGATAGCGCC..... 5411 21
.....AAGCTCAGGAGGATAGCGCCA..... 38 22
.....AAGCTCAGGAGGATAGCGCCAT..... 1 23
.....AAGCTCAGGAGGATAGCGCCATG..... 10 24
.....AGCTCAGGAGGATAGCG..... 1 18
.....AGCTCAGGAGGATAGCGCC..... 13 19
.....AGCTCAGGAGGATAGCGCCA..... 114 20
.....AGCTCAGGAGGATAGCGCCATG..... 272 21
.....AGCTCAGGAGGATAGCGCCATGG..... 1 25
.....GCTCAGGAGGATAGCGCC..... 2 19
.....CTCAGGAGGATAGCGCC..... 3 18
.....CTCAGGAGGATAGCGCCA..... 7 19
.....CTCAGGAGGATAGCGCCATG..... 5 21
.....CAGGAGGATAGCGCCATGCTCA..... 1 24

>ath-miR391_MIMAT000933_Arabidopsis_thaliana_miR391
ATTACACATACAAGTGGCTTCTCTTCTATGTTTTAAAAGTCAAAATAGGATTTGCTTCGAGGAGATAGCGCCATCACCTCTTCAAGAAGTTAACTAGTGGTGACGGTATCTCTCTAGTAGCAATCCTTAT
*****TTCCGAGGAGATAGCGCCA*****
.....TTTGCTTCGAGGAGATAGC..... 2 22
.....TTGCTTCGAGGAGATAGCG..... 3 22
.....CTTCGAGGAGATAGCGCC..... 1 20
.....CTTCGAGGAGATAGCGCC..... 19 21
.....CTTCGAGGAGATAGCGCCA..... 2 22
.....CTTCGAGGAGATAGCGCCATC..... 3 24
.....TTCCGAGGAGATAGCG..... 52 18
.....TTCCGAGGAGATAGCGCC..... 23 19
.....TTCCGAGGAGATAGCGCC..... 1497 20
.....TTCCGAGGAGATAGCGCCA..... 33985 21
.....TTCCGAGGAGATAGCGCCAT..... 62 22
.....TTCCGAGGAGATAGCGCCATC..... 60 23
.....TTCCGAGGAGATAGCGCCATCA..... 197 24

.....TTCCAGGAGAGATAGCCATCAC.....	6	25
.....TCGAGGAGAGATAGCGCC.....	36	19
.....TCGAGGAGAGATAGCGCA.....	1249	20
.....TCGAGGAGAGATAGCGCCAT.....	3	21
.....TCGAGGAGAGATAGCGCCATC.....	14	22
.....TCGAGGAGAGATAGCGCCATCA.....	21	23
.....TCGAGGAGAGATAGCGCCATCAC.....	128	24
.....CGAGGAGAGATAGCGCC.....	6	18
.....CGAGGAGAGATAGCGCCA.....	82	19
.....CGAGGAGAGATAGCGCCATCAC.....	6	23
.....GCAGGAGAGATAGCGCCA.....	20	18
.....GCAGGAGAGATAGCGCCAT.....	1	19
.....CAGGAGAGATAGCGCCATCA.....	1	20
.....CAGGAGAGATAGCGCCATCAC.....	7	21
.....CAGGAGAGATAGCGCCATCACCTC.....	1	24
.....AGGAGAGATAGCGCCATCA.....	1	19
.....AGGAGAGATAGCGCCATCACCC.....	2	21
.....GGAGAGATAGCGCCATCACCC.....	1	20
.....GAGAGATAGCGCCATCACCC.....	2	19
.....AGAGATAGCGCCATCACCT.....	2	19
.....AACTAGTGGTACGGTATCTCTCC.....	1	24
.....AGTGGTACGGTATCTCTCT.....	1	18
.....AGTGGTACGGTATCTCTCTA.....	1	22
.....AGTGGTACGGTATCTCTCTACGTA.....	1	26
.....GTGGTACGGTATCTCTCTC.....	1	18
.....GTGGTACGGTATCTCTCTCC.....	2	19
.....GTGGTACGGTATCTCTCTCT.....	2	20
.....GTGGTACGGTATCTCTCTCTACG.....	1	23
.....TTGGTACGGTATCTCTCTCTAC.....	4	21
.....TTGGTACGGTATCTCTCTCTACGTAG.....	1	25
.....GGTACGGTATCTCTCTCTAC.....	2	20
.....GGTACGGTATCTCTCTCTACG.....	2	21
.....GGTACGGTATCTCTCTCTACGTA.....	13	23
.....GGTACGGTATCTCTCTCTACGTAG.....	9	24
.....GTGACGGTATCTCTCTCTACGTA.....	1	22
.....GTGACGGTATCTCTCTCTACGTAG.....	5	23
.....GTGACGGTATCTCTCTCTACGTAGC.....	86	24
.....GTGACGGTATCTCTCTCTACGTAGCA.....	1	25
.....TGACGGTATCTCTCTCTACGTAG.....	1	22
.....TGACGGTATCTCTCTCTACGTAGC.....	1	23
.....TGACGGTATCTCTCTCTACGTAGCA.....	3	24
.....GACGGTATCTCTCTCTACGTAGC.....	1	22
.....ACGGTATCTCTCTCTACGT.....	3	18
.....ACGGTATCTCTCTCTACGTAG.....	10	19
.....ACGGTATCTCTCTCTACGTAGC.....	12	20
.....ACGGTATCTCTCTCTACGTAGCA.....	1576	21
.....ACGGTATCTCTCTCTACGTAGCA.....	4	22
.....GTATCTCTCTCTACGTAGC.....	1	18
.....GTATCTCTCTCTACGTAGCAAT.....	1	21

>ath-miR393a_MIMAT000934_Arabidopsis_thaliana_miR393a
TTTTAGAGTGAGAGAGATAGAGGTTGAACAATCTTATAGCACTAGAGAAAGGATCCAAAGGATCGCATTGCTCTAATTAAGTGAATCTCCCATATTTCTTTATAATTGGCAATAAATCACAAAAATTT
*****TCCAAAGGATCGCATTGATC*****
.....GGAAGGATCCAAAGGATCGC..... ath-miR393a 22
.....TCCAAAGGATCGCATTG..... 2 21
.....TCCAAAGGATCGCATTGA..... 19 18
.....TCCAAAGGATCGCATTGAT..... 78 19
.....TCCAAAGGATCGCATTGAT..... 33 20
.....TCCAAAGGATCGCATTGATC..... 197 21
.....TCCAAAGGATCGCATTGATCC..... 229 22
.....TCCAAAGGATCGCATTGATCCT..... 2 23
.....CCAAAGGATCGCATTGA..... 3 18
.....CCAAAGGATCGCATTGATC..... 3 20
.....CCAAAGGATCGCATTGATCC..... 3 21

>ath-miR393b_MIMAT000935_Arabidopsis_thaliana_miR393b
AAAAACCATTTGCCACCTTGAAGAGAGAGAGTTCTTACAGCACTAGAGAAAGGATCCAAAGGATCGCATTGCTCTAATTAAGTGAATTTATCCCAATAATTGTTTTTTTCTCTCAATGAAAGATGG
*****TCCAAAGGATCGCATTGATC*****
.....AACTAGAGAAAGGATCCAAAGGAT..... ath-miR393b 22
.....TCCAAAGGATCGCATTG..... 2 24
.....TCCAAAGGATCGCATTGA..... 19 18
.....TCCAAAGGATCGCATTGAT..... 78 19
.....TCCAAAGGATCGCATTGAT..... 33 20
.....TCCAAAGGATCGCATTGATC..... 197 21
.....TCCAAAGGATCGCATTGATCC..... 229 22
.....TCCAAAGGATCGCATTGATCCT..... 2 23
.....CCAAAGGATCGCATTGA..... 3 18
.....CCAAAGGATCGCATTGATC..... 3 20
.....CCAAAGGATCGCATTGATCC..... 3 21

>ath-miR396a_MIMAT000944_Arabidopsis_thaliana_miR396a
CCTCACTCCCTTTCCACAATTAGGTTTCGTCTGCTACATGACCCTCTCTGTATTCTTCCACAGCTTCTTGAACGCAAAACCTTCTCAGATTTTCTTTTCTTTTCTTTGATATCTTACGCATAAAATAGTGT
*****TCCACAGCTTCTTGAACG*****
.....CAATTAGGTTTCGTCTGCTC..... ath-miR396a 21
.....CTCTGTATTCTTCCACAGCTT..... 1 21
.....TGTATTCTTCCACAGCTTCTT..... 2 21
.....TCCACAGCTTCTTGAAC..... 1 21
.....TCCACAGCTTCTTGAAC..... 50 18
.....TCCACAGCTTCTTGAAC..... 213 19
.....TCCACAGCTTCTTGAAC..... 38 20
.....TCCACAGCTTCTTGAAC..... 4598 21
.....TCCACAGCTTCTTGAACG..... 38 22
.....TCCACAGCTTCTTGAACGCA..... 1 23
.....TCCACAGCTTCTTGAACGCAA..... 6 24
.....TCCACAGCTTCTTGAAC..... 13 18
.....TCCACAGCTTCTTGAAC..... 1 19
.....TCCACAGCTTCTTGAACG..... 246 20
.....CCACAGCTTCTTGAACG..... 14 19
.....CCACAGCTTCTTGAACG..... 1 20
.....CCACAGCTTCTTGAACGCA..... 47 21
.....CACAGCTTCTTGAACG..... 15 18

```

.....ACAGCTTCTTGAAGTCA..... 1 19
.....ACAGCTTCTTGAAGTCAAA..... 4 20
.....ACAGCTTCTTGAAGTCAAA..... 5 21

```

```

>ath-miR396b_MIMAT000945_Arabidopsis_thaliana_miR396b
ATTCTCTTAAGTTAATAGTTTCAGAGAAAGGAGAAGTGAAGATCTGGTCATCTTTCCACAGCTTCTTGAAGTCTTTTTCATTCCATTGTTTTTCTTAAACAAAAGTAAAGAGAAAAAACTTAAAG
*****TTCCACAGCTTCTTGAAGTCTT*****
.....TTCCACAGCTTCTTGAAG..... 1 19
.....TTCCACAGCTTCTTGAAG..... 2 18
.....TTCCACAGCTTCTTGAAG..... 213 19
.....TTCCACAGCTTCTTGAAG..... 38 20
.....TTCCACAGCTTCTTGAAG..... 367 21
.....TTCCACAGCTTCTTGAAG..... 4 22
.....TTCCACAGCTTCTTGAAG..... 1 24
.....TTCCACAGCTTCTTGAAG..... 13 18
.....TTCCACAGCTTCTTGAAG..... 1 19
.....TTCCACAGCTTCTTGAAG..... 9 20
.....TTCCACAGCTTCTTGAAG..... 1 19
.....TTCCACAGCTTCTTGAAG..... 1 18

```

```

>ath-miR400_MIMAT0001001_Arabidopsis_thaliana_miR400
TGGCGATTCTTGGTGCACACAAAAGGTAATCTTAACTGTTCTGAGGATGTTTATGAGAGTATTATAAGTCACTACATTTGGTAAGCAAAGTGTGTTTCTCAAACGAAGTACTTATGATAATCTCATGAAT
*****TATGAGAGTATTATAAGTCACT*****
.....TTTATGAGAGTATTATAAGTCA..... 2 21
.....TTTATGAGAGTATTATAAGTCA..... 54 21
.....TATGAGAGTATTATAAGTCA..... 3 18
.....TATGAGAGTATTATAAGTCA..... 1 19
.....TATGAGAGTATTATAAGTCA..... 22 20
.....TATGAGAGTATTATAAGTCA..... 3156 21
.....TATGAGAGTATTATAAGTCA..... 6 22
.....TATGAGAGTATTATAAGTCA..... 12 23
.....TATGAGAGTATTATAAGTCA..... 1 19
.....TATGAGAGTATTATAAGTCA..... 38 20
.....TATGAGAGTATTATAAGTCA..... 1 19
.....TATGAGAGTATTATAAGTCA..... 9 22
.....TATGAGAGTATTATAAGTCA..... 4 18
.....TATGAGAGTATTATAAGTCA..... 2 20
.....TATGAGAGTATTATAAGTCA..... 24 21
.....TATGAGAGTATTATAAGTCA..... 1 20
.....TATGAGAGTATTATAAGTCA..... 3 21
.....TATGAGAGTATTATAAGTCA..... 1 24
.....TATGAGAGTATTATAAGTCA..... 1 18
.....TATGAGAGTATTATAAGTCA..... 18 21
.....TATGAGAGTATTATAAGTCA..... 1 19
.....TATGAGAGTATTATAAGTCA..... 1 20
.....TATGAGAGTATTATAAGTCA..... 8 21
.....TATGAGAGTATTATAAGTCA..... 1 19
.....TATGAGAGTATTATAAGTCA..... 3 20

```

```

>ath-miR402_MIMAT0001003_Arabidopsis_thaliana_miR402
AGATAAGTTTGAAGTGCATAGTGGCAGCTTCTTGTGTTGTTAAACCATATTTTCATGATTCGAGGCCTATTAAACCTCTGTACATCTGCTTTTGAAGTGTGCTATTTTCTGAAATCTTCTGCTCAATTTCCAAC
*****TTCCGAGGCCTATTAAACCTCT*****
.....TTCCGAGGCCTATTAAACCTCT..... 1 22
.....TTCCGAGGCCTATTAAACCTCT..... 2 18
.....TTCCGAGGCCTATTAAACCTCT..... 1 19
.....TTCCGAGGCCTATTAAACCTCT..... 1 20
.....TTCCGAGGCCTATTAAACCTCT..... 1 21
.....TTCCGAGGCCTATTAAACCTCT..... 46 22
.....TTCCGAGGCCTATTAAACCTCT..... 1 23
.....TTCCGAGGCCTATTAAACCTCT..... 2 25
.....TTCCGAGGCCTATTAAACCTCT..... 3 21
.....TTCCGAGGCCTATTAAACCTCT..... 1 18

```

```

>ath-miR403_MIMAT0001004_Arabidopsis_thaliana_miR403
TAATTCACAGGCTTATGTAAGAGATTCTTTAAACCTCTTAATCTTGTGTTGAGGATTAGATTCACGCCAAACCTGTAATCTGTCTTTGATTTTACCAGATCTGTCTCGATTGGAATCGATCTCTTTGAT
*****TTAGATTACGCCAAACCTG*****
.....GGATTAGATTCACGCCAAAC..... 1 18
.....GGATTAGATTCACGCCAAAC..... 1 21
.....GGATTAGATTCACGCCAAAC..... 6 23
.....GGATTAGATTCACGCCAAAC..... 3 24
.....GATTAGATTCACGCCAAAC..... 1 21
.....GATTAGATTCACGCCAAAC..... 1 22
.....GATTAGATTCACGCCAAAC..... 2 23
.....TTAGATTACGCCAAAC..... 151 18
.....TTAGATTACGCCAAAC..... 68 19
.....TTAGATTACGCCAAAC..... 174 20
.....TTAGATTACGCCAAAC..... 1217 21
.....TTAGATTACGCCAAAC..... 153 22
.....TTAGATTACGCCAAAC..... 1 23
.....TAGATTACGCCAAAC..... 3 18
.....TAGATTACGCCAAAC..... 19 20
.....TAGATTACGCCAAAC..... 2 18
.....TAGATTACGCCAAAC..... 18 19
.....GATTACGCCAAAC..... 4 18
.....GATTACGCCAAAC..... 1 20
.....ATTACGCCAAAC..... 1 18
.....ATTACGCCAAAC..... 2 20

```

```

>ath-miR406_MIMAT0001009_Arabidopsis_thaliana_miR406
TAGATTGATTTTCTTTTATTAGTTCTTAAATTTGATTGAGACAGTAATCTCAATAGAGTCTATTGTAATCCAGAATCCGAAAGAAACGAATCAAAAAAAGAGCTTCTCATGATAAAATGATTA
*****TAGAATGCTATTGTAATCAG*****
.....ATTGAGACAGTAATCTCAAA..... 2 24
.....AGAATGCTATTGTAATCAG..... 1 24
.....AGAATGCTATTGTAATCAG..... 1 22
.....ACGAGTCTTATGATAAAATCGA..... 1 24

```

>ath-miR407_MIMAT0001010_Arabidopsis_thaliana_miR407
TTAAAAAATCGCCAACCTTTAAAAATGGGACAAAAAATGCCCACTCTGAAATGCTTTAAATCATATACCTTTGGTACTCTTCAGAAAAGATAAAAAGCAAGATTGTAATCAACAAAATCTTGTCTGTGA
*****TTTAAATCATATACCTTTGGT*****
.....AAAAATGGGACAAAAAATCGCCA.....
.....AAATGGGACAAAAAATCGCCAAC.....
.....CGCCAATCTCTGAAATGTCA.....
.....ATCAACAAAATCTTGTCTGTGA

ath-miR407 21
1 24
1 24
1 20
1 23

>ath-miR408_MIMAT0001011_Arabidopsis_thaliana_miR408
ACAAGCAGAGCATGGATTGAGTTTACTAAAACATTAACGACTCTGTTTGGTCTACCCATGCACTGCCTCTCCCTGGCTCCCTCTTTTCTCTATATTCTCTCTCTCTTCATTTCACAGCTTCATGGAAAT
*****ATGCACTGCCTCTCCCTGGC*****
.....CATGCACTGCCTCTCCCTGGCT.....
.....ATGCACTGCCTCTCCCT.....
.....ATGCACTGCCTCTCCCTG.....
.....ATGCACTGCCTCTCCCTGG.....
.....ATGCACTGCCTCTCCCTGGC.....
.....ATGCACTGCCTCTCCCTGGCT.....
.....ATGCACTGCCTCTCCCTGGCTC.....
.....TGCACCTCTCCCTGG.....
.....TGCACCTCTCCCTGGCT.....
.....TGCACCTCTCCCTGGCT.....
.....TGCACCTCTCCCTGGCT.....
.....TGCACCTCTCCCTGGCTC.....
.....GCACTGCCTCTCCCTGGC.....

ath-miR408 21
3 24
2 18
2 19
6 20
344 21
1 22
1 23
1 19
8 20
5 21
4 22
6 19

>ath-miR172e_MIMAT0001019_Arabidopsis_thaliana_miR172e
GAGATGGTCCCTTCCTCGCTCTCGATCCGAGAAAAGGTTCTTATCAGTGGAAATCTTGATGCTGCATCAGCAAACATCGCTACTCTGTGCACTTCTTTGATCTCTAGTGAAGAGAGTAA
*****GGAATCTTGATGCTGCAT*****
.....GTGGAAATCTTGATGCTGCA.....
.....GGAATCTTGATGCTGCAT.....
.....GGAATCTTGATGCTGCAT.....
.....GAACTTGATGCTGCAT.....
.....GAATCTTGATGCTGCAT.....
.....GAATCTTGATGCTGCAT.....
.....GAATCTTGATGCTGCAT.....
.....AATCTTGATGCTGCAT.....
.....AATCTTGATGCTGCAT.....
.....ATCTTGATGCTGCAT.....

ath-miR172e 21
1 23
2 20
153 21
37 18
92 19
29 20
3 18
138 19
6 18

>ath-miR447a_MIMAT0002113_Arabidopsis_thaliana_miR447a
TTTTTCTAGCACTCAAGTCTCGAGTTGATCATGTTTGTATTCTTGAGACATATTGGGGACGAGATGTTTTGTTGACTCGATATAAAGAGGGCTTTATGGAGAAATTGTAGTATTATATCGAGAGTGGCTC
*****TTGGGGACGAGATGTTTTGTTG*****
.....TGAGACATATTGGGGACGAG.....
.....TTGGGGACGAGATGTTTTGTT.....
.....TTGGGGACGAGATGTTTTGT.....
.....TTGGGGACGAGATGTTTTGTT.....
.....TTGGGGACGAGATGTTTTGTTG.....
.....TTGGGGACGAGATGTTTTGTTGA.....
.....TTGGGGACGAGATGTTTTGTT.....
.....TTGGGGACGAGATGTTTTGTT.....
.....TTGGGGACGAGATGTTTTGTT.....
.....TTGGGGACGAGATGTTTTGTTG.....
.....TTGGGGACGAGATGTTTTGTTGA.....
.....TTGGGGACGAGATGTTTTGTTGAC.....
.....TTTTGTTGACTCGATATAAGA.....
.....GACTCGATATAAAGAGGGCT.....
.....ACTCGATATAAAGAGGGCT.....
.....ACTCGATATAAAGAGGGCT.....
.....ACTCGATATAAAGAGGGCT.....
.....TTATGGAAGAAATTGTAGTA.....
.....TTATGGAAGAAATTGTAGTAT.....
.....TATGGAAGAAATTGTAGT.....
.....TATGGAAGAAATTGTAGTATT.....
.....ATGGAAGAAATTGTAGTATT.....
.....AAGAAATTGTAGTATTATATA.....
.....AATTGTAGTATTATATATCGA.....

ath-miR447a 22
1 22
4 22
3 20
1 21
34 22
3 23
2 19
1 20
30 21
2 22
2 23
1 21
8 21
1 19
2 20
28 21
1 20
11 21
2 18
27 21
1 20
2 21
1 21

>ath-miR447b_MIMAT0002114_Arabidopsis_thaliana_miR447b
TGTTTTCTAGCCAGCCCAAGTCTCGAGTTGATCATTGTTGTATTCTGACACATATTGGGGACGAGATGTTTTGTTGACTCGATATAAAGAGGGCTTTATGGAGAAATTGTAGTATTATATGAGAAATGGCTC
*****TTGGGGACGAGATGTTTTGTTG*****
.....TTGGGGACGAGATGTTTTGTT.....
.....TTGGGGACGAGATGTTTTGT.....
.....TTGGGGACGAGATGTTTTGTT.....
.....TTGGGGACGAGATGTTTTGTTG.....
.....TTGGGGACGAGATGTTTTGTTGA.....
.....TTGGGGACGAGATGTTTTGT.....
.....TTGGGGACGAGATGTTTTGTT.....
.....TTGGGGACGAGATGTTTTGTTG.....
.....TTGGGGACGAGATGTTTTGTTGA.....
.....TTTTGTTGACTCGATATAAGA.....
.....GACTCGATATAAAGAGGGCT.....
.....ACTCGATATAAAGAGGGCT.....
.....ACTCGATATAAAGAGGGCT.....
.....ACTCGATATAAAGAGGGCT.....
.....TTATGGAAGAAATTGTAGTA.....
.....TTATGGAAGAAATTGTAGTAT.....
.....TATGGAAGAAATTGTAGT.....
.....TATGGAAGAAATTGTAGTATT.....
.....ATGGAAGAAATTGTAGTATT.....
.....AAGAAATTGTAGTATTATATA.....

ath-miR447b 22
4 22
3 20
1 21
34 22
3 23
2 19
1 20
30 21
2 22
2 23
1 21
8 21
1 19
2 20
28 21
1 20
11 21
2 18
27 21
1 20
2 21

>ath-miR472_MIMAT0003931_Arabidopsis_thaliana_miR472
TGTTGATTGTAGGTTTGTGTTGCAAGTGTGAGATCGCAAGATTGAGTAAGATTTCCTACTCCGCCATACCACATACACCTAATCTGAGTCCATCTGATGGTACTACTGGAGTCCAAACTAAT
*****TTTTCTACTCCGCCATAC*****
.....ATTTTCTACTCCGCCATAC.....
.....TTTTCTACTCCGCCAT.....
.....TTTTCTACTCCGCCATACC.....
.....TTTTCTACTCCGCCATAC.....

ath-miR472 22
1 21
1 19
12 22
1 20

```

.....TTTTCTACTCGGCCATACC..... 11 21
.....TTTCTACTCGGCCATACC..... 2 20
.....TTCTACTCGGCCATACC..... 2 19
.....TCCTACTCGGCCATACC..... 1 18
.....TCCTACTCGGCCATACCATAC..... 1 22
.....TACTCGGCCATACCATACAT..... 1 21
.....TACTCGGCCATACCATACATA..... 49 22
.....TACTCGGCCATACCATACATAC..... 1 23
.....ACTCGGCCATACCATACAT..... 1 20
.....CGGCCATACCATACATACACC..... 3 22
.....ATACATACACCTAATCCT..... 1 18
.....ATACATACACCTAATCCTG..... 1 19
.....ATACATACACCTAATCCTGA..... 5 20
.....ATACATACACCTAATCCTGAG..... 303 21
.....ATACATACACCTAATCCTGAGT..... 1 22
.....TACATACACCTAATCCTGAG..... 1 20
.....ACATACACCTAATCCTGAG..... 7 19

```

```

>ath-miR775_MIMAT0003934_Arabidopsis_thaliana_miR775
TTTCAACATTCCAATATTTCAACTTCGAATACCCAATATTTGGTTTGTCAAAGACATTTTCATGCTAGCAGTCCCAATGTTAAATCAACTGATAATTTGGAAATTAATGTGATAAAGATTGCAACTTTTATTT
*****
.....ATATTTGGTTTGTCAAAGACATT..... ath-miR775 20
.....TTTGGTTTGTCAAAGACATT..... 4 24
.....TTTGGTTTGTCAAAGACATTTTC..... 2 21
.....TTTGGTTTGTCAAAGACATTTC..... 3 24
.....TTTCGATGCTAGCAGTG..... 3 19
.....TTTTCGATGCTAGCAGTGC..... 2 20
.....TTTTCGATGCTAGCAGTGCC..... 38 21
.....TTTTCGATGCTAGCAGTGCCA..... 115 22
.....TTTTCGATGCTAGCAGTGCCAA..... 466 23
.....TTTTCGATGCTAGCAGTGCCAAAT..... 5 24
.....TTTCGATGCTAGCAGTGCC..... 6 20
.....TTTCGATGCTAGCAGTGCCA..... 32 21
.....TTTCGATGCTAGCAGTGCCAA..... 68 22
.....TTTCGATGCTAGCAGTGCC..... 12 19
.....TTTCGATGCTAGCAGTGCCA..... 1630 20
.....TTTCGATGCTAGCAGTGCCA..... 454 21
.....TTTCGATGCTAGCAGTGCCAAAT..... 73 22
.....TCGATGCTAGCAGTGCC..... 1 18
.....TCGATGCTAGCAGTGCCA..... 60 19
.....TCGATGCTAGCAGTGCCAA..... 11 20
.....TCGATGCTAGCAGTGCCAAAT..... 6 21
.....CGATGCTAGCAGTGCCA..... 33 18
.....CGATGCTAGCAGTGCCA..... 5 19
.....CGATGCTAGCAGTGCCAAAT..... 1 20
.....GATGCTAGCAGTGCCA..... 3 18
.....GATGCTAGCAGTGCCAAAT..... 1 19
.....TCTAGCAGTGCCAAATGTTAAA..... 1 22

```

```

>ath-miR777_MIMAT0003936_Arabidopsis_thaliana_miR777
ATTTGTAAGCAAAAGTTTATAATAGTGCCTGCTGATCACTTAATCTTAACCTAATACGCTTGGATTTGCTGCTTCTCGGGAAAAATCTCTTTGTAACCTAATCTTTATGTACTACTAAAAATCTCATGTTGA
*****
.....TTAACTAATACGCTTGGATG..... ath-miR777 22
.....TTAACTAATACGCTTGGATTT..... 1 20
.....AATACGCTTGGATTTGCTTGC..... 1 22
.....ATACGCTTGGATTTGCTTGC..... 8 22
.....TACGCTTGGATTTGCTTGC..... 2 18
.....TACGCTTGGATTTGCTTGC..... 3 19
.....TACGCTTGGATTTGCTTGC..... 1 20
.....TACGCTTGGATTTGCTTGC..... 6 21
.....TACGCTTGGATTTGCTTGC..... 85 22
.....TACGCTTGGATTTGCTTGC..... 1 23
.....TACGCTTGGATTTGCTTGC..... 4 25
.....ACGCTTGGATTTGCTTGC..... 2 21

```

```

>ath-miR829.1_MIMAT0004245_Arabidopsis_thaliana_miR829.1
TTGTACTTTGAAGCTTTGATTTGAACCTGTCAATTTGATCAAAAGCTTCTAAATCTTGAAGCTCTGATACCAATGATGGAATCAATTAAGCTTCAAGGTAGTAGTCATCTTGGCAGAGAAAAAGAAAGCACTTCGAGTT
*****
.....AGCTCTGATACCAATGATGGAAT..... ath-miR829.1 24
.....TGAAGCTCTGATACCAATGATGG..... 3 24
.....GAAGCTCTGATACCAATGATGGA..... 2 24
.....AAGCTCTGATACCAATGATGGAA..... 1 24
.....AGCTCTGATACCAATGATGGAA..... 1 23
.....AGCTCTGATACCAATGATGGAAT..... 7 24
.....ATTAAAGCTTCAAGGTAGTAGTCA..... 1 24

```

```

>ath-miR840_MIMAT0004262_Arabidopsis_thaliana_miR840
GACTCGGGTCTCGTAAAGCAGGTGATTCACCAATTTAGGTTTACATCCACAGTGTGGAAGACACTGAAGGACCTAACTAACAAGGTAACGGCTCAGTGTGCGGGTATTACACTCGGTTAATGTCTGAATGCGGATAAT
*****
.....TGAAGACACTGAAGGACCTAAAC..... ath-miR840 22
.....ACACTGAAGGACCTAAACTA..... 1 24
.....ACACTGAAGGACCTAAACTA..... 1 20
.....ACACTGAAGGACCTAAACTAAC..... 23 22
.....CACTGAAGGACCTAAACTAAC..... 2 21

```

```

>ath-miR843_MIMAT0004265_Arabidopsis_thaliana_miR843
GCCTAGCAGCGAATGCCAACAACCTCGCGTATTCTGAAAACCTCATATCTATTTCTTTAGGTCGAGCTTCATTGGAACCAATGGTGGCTCATCCATCTATTACTAAAGCTATACAGCAGGTGACAAGCCATCAT
*****
.....TTTAGGTCGAGCTTCATTGGA..... ath-miR843 21
.....TTTAGGTCGAGCTTCATTGG..... 15 20
.....TTTAGGTCGAGCTTCATTGGA..... 801 21
.....TTTAGGTCGAGCTTCATTGGAA..... 3 22
.....TTTAGGTCGAGCTTCATTGG..... 1 19
.....TTTAGGTCGAGCTTCATTGGAA..... 60 20
.....TTTAGGTCGAGCTTCATTGGAA..... 252 21
.....TTTAGGTCGAGCTTCATTGGAA..... 5 22
.....TAGGTCGAGCTTCATTGGA..... 28 19

```

```

.....TAGGTCGAGCTTCATTGGAA.....10 20
.....TAGGTCGAGCTTCATTGGAAC.....5 21
.....AGGTCGAGCTTCATTGGA.....1 18
.....AGGTCGAGCTTCATTGGAA.....1 19
.....AGGTCGAGCTTCATTGGAAC.....1 20
.....AGGTCGAGCTTCATTGGAAC.....1 21
.....AGGTCGAGCTTCATTGGAACAAA.....1 24

```

```

>ath-miR848_MIMAT0004270_Arabidopsis_thaliana_miR848
ATCTCATGTCAAATAAGGAAAAGAGGAAACCAAGGTATGTTCTCATCTACCTCTTTGACATGGGACTGCCTAAGCTAAAGGCTGGCATGTTATCACATCTTCTTTATTGTCGCAACCACTTTATCCTTATCA
*****TGCATGGGACTGCCTAAGCTA*****
.....TCATGTCAAATAAGGAAAAGAGG.....ath-miR848 22
.....TTGACATGGGACTGCCTAAGC.....1 26
.....TGACATGGGACTGCCTAAG.....4 21
.....TGACATGGGACTGCCTAAG.....1 19
.....TGACATGGGACTGCCTAAGCT.....1 21
.....TGACATGGGACTGCCTAAGCTA.....67 22
.....GACATGGGACTGCCTAAGCTA.....1 21
.....GACATGGGACTGCCTAAGCTAA.....1 22
.....CATGGGACTGCCTAAGCTAAAGGC.....3 24
.....ATGGGACTGCCTAAGCTAAAGGCT.....1 24
.....TGGGACTGCCTAAGCTAAAG.....1 20
.....TGGGACTGCCTAAGCTAAAGG.....2 22
.....TGGGACTGCCTAAGCTAAAGGCT.....1 23
.....TGGGACTGCCTAAGCTAAAGGCTT.....17 24
.....GGGACTGCCTAAGCTAAAGGCTT.....1 23

```

```

>ath-miR850_MIMAT0004272_Arabidopsis_thaliana_miR850
CTTTCTCACGTTTTAGATAGTGTATGTTATTTCTTACTATAGAACTGTCAGTAAGATCCGGACTACAACAAAGCAGCTTACTACTATATCTTTGCGATAATCAATAGATTCTTAAACATCGTAAAGG
*****TAAGATCCGGACTACAACAAAG*****
.....AACCTGTGACGTAAGATCCGGACTA.....ath-miR850 22
.....TGTGACGTAAGATCCGGAC.....3 25
.....TGTGACGTAAGATCCGGACT.....1 19
.....TGTGACGTAAGATCCGGACTAC.....11 22
.....TGTGACGTAAGATCCGGACTACA.....1 23
.....TGTGACGTAAGATCCGGACTACAAC.....1 25
.....TCAGTAAGATCCGGACT.....2 18
.....TCAGTAAGATCCGGACTA.....3 19
.....TCAGTAAGATCCGGACTAC.....8 20
.....TCAGTAAGATCCGGACTACA.....64 21
.....TCAGTAAGATCCGGACTACAA.....246 22
.....TCAGTAAGATCCGGACTACAAC.....11 23
.....CAGTAAGATCCGGACTACA.....2 20
.....CAGTAAGATCCGGACTACA.....10 21
.....CAGTAAGATCCGGACTACAAC.....5 22
.....CAGTAAGATCCGGACTACAAC.....1 23
.....CTAAGATCCGGACTACA.....2 18
.....TAAGATCCGGACTACAAC.....2 19
.....TAAGATCCGGACTACAACAA.....1 20
.....TAAGATCCGGACTACAACAAAG.....20 22
.....TAAGATCCGGACTACAACAAAGC.....1 23
.....AAGATCCGGACTACAAC.....1 18
.....AAGATCCGGACTACAACAA.....1 19
.....AAGATCCGGACTACAACAAAG.....6 21
.....AAGATCCGGACTACAACAAAGC.....22 22
.....ATCCGGACTACAACAAAGC.....1 19
.....GACTACAACAAAGCAGCTTACTC.....1 24
.....AACAAAGCAGCTTACTCTAC.....9 21

```

```

>ath-miR852_MIMAT0004275_Arabidopsis_thaliana_miR852
GATATTGCATGGAGTATGCTTCTACTTCTAGGAGATGCGTTTATGAAATATCAAGAAGATAAGCGCCTTAGTTCAGAGATAAGCGCCTTATTCACAAAATGCATAAGGTTGATTCTTTGTTAGGTTTATCCAGC
*****AAGATAAGCGCCTTAGTTCG*****
.....ATATCAAGAAGATAAGCGCC.....ath-miR852 21
.....TCAAGAAGATAAGCGCCTTA.....1 21
.....AAGAAGATAAGCGCCTTAGTT.....5 21
.....AGAAGATAAGCGCCTTAG.....1 18
.....AGAAGATAAGCGCCTTAGTTC.....2 21
.....AAGATAAGCGCCTTAGTTC.....2 19
.....AAGATAAGCGCCTTAGTTCG.....71 21
.....AAGATAAGCGCCTTAGTTCCTGA.....51 22
.....AAGATAAGCGCCTTAGTTCCTGAA.....4 23
.....AAGATAAGCGCCTTAGTTCCTGAAG.....1 24
.....AGATAAGCGCCTTAGTTC.....1 18
.....AGATAAGCGCCTTAGTTCCTGA.....33 21
.....AGATAAGCGCCTTAGTTCCTGAA.....1 22

```

```

>ath-miR860_MIMAT0004304_Arabidopsis_thaliana_miR860
TAGTCCAACTATTGAAGTACTAGTACACAGCTCTAATAAGCTGATGGGTAAGTAGTTCATAGATTGGACTATGATATATAAATTTGACTAAGAGATAAACTAGAGAAATGGAATAAAGAAATGAGAAACGGTATTAG
*****TCAATAGATTGGACTATGAT*****
.....TCTAATAAGCTGATGGGTA.....ath-miR860 21
.....AGCTGATGGGTAAGTAGTTCATAG.....1 22
.....CTGATGGGTAAGTAGTTCATAG.....1 26
.....TGTGGTAAGTAGTTCATAG.....1 22
.....TGGGTAAGTAGTTCATAGATTGG.....1 24
.....AAGTAGTTCATAGATTGGAC.....1 21
.....GTTCAATAGATTGGACTA.....1 18
.....GTTCAATAGATTGGACTATGAT.....1 23
.....TCAATAGATTGGACTATGTT.....2 19
.....TCAATAGATTGGACTATGTA.....1 20
.....TCAATAGATTGGACTATGAT.....24 21
.....CAATAGATTGGACTATGTA.....2 19
.....AATAGATTGGACTATGATAT.....2 21
.....AATAGATTGGACTATGATATTA.....2 24
.....ATAGATTGGACTATGATATTT.....10 21
.....ATAGATTGGACTATGATATTA.....1 22
.....TAGATTGGACTATGATATTAAT.....2 24
.....AGATTGGACTATGATATTT.....1 19
.....AGATTGGACTATGATATTA.....18 21

```



```

.....GATGGACTATGTATATTA.. 1 20
.....GATTGGACTATGTATATTA.. 1 21
.....TGGACTATGTATATTAAT.. 1 19

```

```

>ath-miR861-3p_MIMAT0004306_Arabidopsis_thaliana_miR861-3p
AATATCGCTCAATGAGTCGCTCTCTTGAGAAGCATTTTGGAGTGAAGATGTTCTCATGGATATGCTTCAAGGACTCTTTCAACAATGGTACTTCTTAATACTGGGATGTGAGAGGTAACATGATATTA
*****GATGGATATGCTTCAAGGAC*****
.....CATGGATATGCTTCAAG..... 2 21
.....CATGGATATGCTTCAAGGAC..... 4 24
.....TGATGGATATGCTTCAAGGAC..... 1 22
.....GATGGATATGCTTCAAGGAC..... 4 21
.....ATGGATATGCTTCAAGGAC..... 1 20

```

```

>ath-miR863-5p_MIMAT0004310_Arabidopsis_thaliana_miR863-5p
CAGATATCTTGACTCATAAGATGTAGAACTAGAGAAGAGTTGGGGAAACTTCTTATGCTTGTGATCTCAATAGCATTGATACAATGTATATATGCAATTTAGAATATGTTTTCTAATTTGAATAAGA
*****TTATGCTTGTGATCTCAAT*****
.....TTCTTATGCTTGTGATCTC..... 2 21
.....TTCTTATGCTTGTGATCTCA..... 1 22
.....TCTTATGCTTGTGATCTCA..... 2 21
.....TCTTATGCTTGTGATCTCAATA..... 1 24
.....CTTATGCTTGTGATCTCA..... 1 20
.....CTTATGCTTGTGATCTCA..... 8 21
.....TTATGCTTGTGATCTCAAT..... 3 21
.....TTATGCTTGTGATCTCAATAGCA..... 1 25
.....TATGCTTGTGATCTCAATA..... 3 21
.....TATGCTTGTGATCTCAATAGCA..... 3 24
.....ATGCTTGTGATCTCAATA..... 1 20
.....ATGCTTGTGATCTCAATAG..... 2 21
.....ATGCTTGTGATCTCAATAGCATT..... 1 25
.....TGTCTTGTGATCTCAATAGC..... 1 21
.....TCTTGTGATCTCAATAGCAT..... 11 21
.....TCTTGTGATCTCAATAGCATT..... 3 22
.....CTTGTGATCTCAATAGCATT..... 1 21
.....CTTGTGATCTCAATAGCATTGAT..... 1 24
.....TTGTGATCTCAATAGCA..... 1 18
.....TTGTGATCTCAATAGCAT..... 1 19
.....TTGTGATCTCAATAGCATT..... 4 20
.....TTGTGATCTCAATAGCATTG..... 30 21
.....TGTGATCTCAATAGCAT..... 1 18
.....TGTGATCTCAATAGCATTG..... 2 20
.....TGTGATCTCAATAGCATTGA..... 1 21
.....TGTGATCTCAATAGCATTGAT..... 1 22
.....TTGATCTCAATAGCATTGAT..... 1 20
.....ATAGCATTGATACAATGTATA..... 1 21
.....ATACAATGTATATATATGCAA..... 4 21
.....TACAATGTATATATGCAAT..... 4 21
.....TATATATGCAATTTAGAATAT..... 1 21
.....ATATATGCAATTTAGAATATGTT..... 1 24
.....TATGCAATTTAGAATATGTT..... 2 21
.....ATGCAATTTAGAATATGTTT..... 2 21
.....CAATTTAGAATATGTTTCTCA..... 1 23
.....TTTGAATATGTTTCTCA..... 14 21

```

```

>ath-miR863-3p_MIMAT0004310_Arabidopsis_thaliana_miR863-3p
TTTATTCAAATTAGGTGAAACATAAATCTAGGTTGTATATATATGTTATACCAATCGGATTGAGAGCAACAAGACATAATAAAGAGTTTGGAAACTTTTTCTAGTTTCTACATAAGAGGATCTGACACCTGGAAT
*****TTGAGAGCAACAAGACATAA*****
.....ATTCAAATTAGGTGAAACATA..... 1 21
.....ATTAGGTGAAACATAAATCTAG..... 1 21
.....AGGTGAAACATAAATCTAGTTGTA..... 2 24
.....TGAAACATAAATCTAGTTGTA..... 5 21
.....ACATAAATCTAGTTGTATAT..... 1 21
.....ACATAAATCTAGTTGTATATA..... 1 22
.....ACATAAATCTAGTTGTATATA..... 9 21
.....ATAAATCTAGTTGTATATA..... 4 21
.....TATATATGTTATACCAATGCG..... 1 21
.....ATATGTTATACCAATGCGA..... 107 21
.....ATATGTTATACCAATGCGA..... 2 19
.....ATACCAATGCGATTGAGAGCAA..... 1 22
.....TACCAATGCGATTGAGAGCAA..... 30 21
.....ACCAATGCGATTGAGAGCAA..... 1 20
.....ACCAATGCGATTGAGAGCAAC..... 11 21
.....ACCAATGCGATTGAGAGCAACAAG..... 1 24
.....CAATGCGATTGAGAGCAACAA..... 14 21
.....CAATGCGATTGAGAGCAACAAGA..... 1 23
.....CAATGCGATTGAGAGCAACAAGAC..... 16 24
.....AATGCGATTGAGAGCAACAA..... 1 20
.....AATGCGATTGAGAGCAACAAG..... 100 21
.....AATGCGATTGAGAGCAACAAGA..... 4 22
.....AATGCGATTGAGAGCAACAAGAC..... 1 23
.....AATGCGATTGAGAGCAACAAGACA..... 17 24
.....ATGCGATTGAGAGCAACA..... 2 18
.....ATGCGATTGAGAGCAACA..... 2 19
.....ATGCGATTGAGAGCAACAAG..... 12 20
.....ATGCGATTGAGAGCAACAAGA..... 548 21
.....ATGCGATTGAGAGCAACAAGAC..... 18 22
.....ATGCGATTGAGAGCAACAAGACA..... 17 23
.....ATGCGATTGAGAGCAACAAGACAT..... 40 24
.....TGCGATTGAGAGCAACAAG..... 5 19
.....TGCGATTGAGAGCAACAAGA..... 29 20
.....TGCGATTGAGAGCAACAAGAC..... 485 21
.....TGCGATTGAGAGCAACAAGACA..... 64 22
.....TGCGATTGAGAGCAACAAGACATA..... 1 24
.....GCGATTGAGAGCAACAAGA..... 12 19
.....GCGATTGAGAGCAACAAGAC..... 30 20
.....GCGATTGAGAGCAACAAGACA..... 30 21
.....GCGATTGAGAGCAACAAGACAT..... 4 22
.....CGATTGAGAGCAACAAGA..... 1 18
.....CGATTGAGAGCAACAAGAC..... 1 19

```

```

.....CGATTGAGCAACAAGACAT..... 4 21
.....CGATTGAGCAACAAGACATAA..... 2 24
.....CGATTGAGCAACAAGACATAATA..... 1 25
.....CGATTGAGCAACAAGACATAATAAAG..... 1 28
.....GATTGAGCAACAAGACATA..... 1 21
.....ATTGAGCAACAAGACA..... 1 18
.....ATTGAGCAACAAGACATAA..... 1 21
.....ATTGAGCAACAAGACATAATAA..... 1 24
.....TTGAGCAACAAGACAT..... 1 18
.....TTGAGCAACAAGACATA..... 2 19
.....TTGAGCAACAAGACATAA..... 24 20
.....TTGAGCAACAAGACATAAT..... 214 21
.....TTGAGCAACAAGACATAATA..... 5 22
.....TTGAGCAACAAGACATAATAA..... 2 23
.....TTGAGCAACAAGACATAATAA..... 8 24
.....TGAGCAACAAGACATAA..... 2 19
.....TGAGCAACAAGACATAAT..... 6 20
.....TGAGCAACAAGACATAATA..... 11 21
.....GAGCAACAAGACATAATA..... 1 20
.....AGCAACAAGACATAATAAAGAG..... 2 24
.....AGCAACAAGACATAATAAAGAG..... 1 22
.....GCAACAAGACATAATAAAGAG..... 1 21

```

```

>ath-miR865-5p_MIMAT0004313_Arabidopsis_thaliana_miR865-5p
GATTGGGGTTTCTGGTAACTCCTTTAATCTCAGCTCGTCAGACAAAATGATCTGGGATGAATTTGGTCTAATTGAGCAAAAAATGTGTTTTTCAATCTATTGAATTCACATCCTTAAACCCCTGGATATTCAA
*****ATGAATTTGGATCTAATTGAG*****
.....AAAATGATCTGGGATGAATTTGG..... ath-miR865-5p 21
.....AAAATGATCTGGGATGAATTTGGGA..... 1 25
.....ATCTGGGATGAATTTGGATCT..... 1 21
.....TCTGGGATGAATTTGGAT..... 1 18
.....TCTGGGATGAATTTGGATC..... 2 19
.....TCTGGGATGAATTTGGATCT..... 2 20
.....TCTGGGATGAATTTGGATCTA..... 8 21
.....TCTGGGATGAATTTGGATCTAAT..... 1 23
.....ATGAATTTGGATCTAATTGAG..... 4 21
.....TGAATTTGGATCTAATTGAG..... 1 20
.....TGAATTTGGATCTAATTGAGC..... 1 21
.....AATTTGGATCTAATTGAG..... 3 18
.....AATTTGGATCTAATTGAGCAA..... 1 21
.....TTGGATCTAATTGAGCAAAA..... 1 21
.....TTGGATCTAATTGAGCAAAA..... 1 22
.....TTGGATCTAATTGAGCAAAA..... 1 21

```

```

>ath-miR866-5p_MIMAT0004315_Arabidopsis_thaliana_miR866-5p
TCATCATCAGCTCTTATTTTCTCAATTCATCAATCATCATCTATTCTTACTTTTCAAGGAACGGATTTTGTAACTAAATGATTCACACCCCTGAAGAAACACGATCTCGTGAATCATTTCGTTAAACAAAAT
*****TCAAGGAACGGATTTTGTAA*****
.....TTTCAAGGAACGGATTTTGTAA..... ath-miR866-5p 21
.....TTCAAGGAACGGATTTTGT..... 1 23
.....TTCAAGGAACGGATTTTGT..... 1 19
.....TTCAAGGAACGGATTTTGTAA..... 5 21
.....TTCAAGGAACGGATTTTGTAA..... 12 22
.....TCAAGGAACGGATTTTGTAA..... 5 20
.....TCAAGGAACGGATTTTGTAA..... 4 21
.....TCAAGGAACGGATTTTGTAAAC..... 11 22
.....CAAGGAACGGATTTTGTAA..... 1 19
.....CAAGGAACGGATTTTGTAA..... 1 20

```

```

>ath-miR1888_MIMAT0007855_Arabidopsis_thaliana_miR1888
TCATTATGGTGGATCATTATTGGTGGATCATTATTGGTGGATCTTAAACAAAATTTTAAAGTTAAGATTGTGAAGAAAGACTTTTATATAAGAGTTTTAGGCTTATATTTAAATTTTTTCTCATAAATCTTAGC
*****TAAGTTAAGATTGTGAAGAA*****
.....ATTGGTGGATCTTAAACAAA..... ath-miR1888 21
.....TGTGGTATCTTAAACAAA..... 13 21
.....TTAAGTTAAGATTGTGAAGA..... 1 19
.....TTAAGTTAAGATTGTGAAGA..... 1 21
.....TTAAGTTAAGATTGTGAAGA..... 8 22
.....TAAGTTAAGATTGTGAAGA..... 44 21
.....AAGTTAAGATTGTGAAGA..... 2 20
.....AGTTAAGATTGTGAAGAAGAA..... 2 22
.....GATTTGTGAAGAAAGACTTTTAT..... 1 24

```

```

>ath-miR2112-5p_MIMAT0011154_Arabidopsis_thaliana_miR2112-5p
ACTATATCAAGATCTCAACTAACTGAGTTATTGAAGCATACAAAAGTAAATGATGCGCAATGCGGATATCAATGTAATCAGGCAACAAACCAATAGAGGTCTCAGCGAAAACAAAATGTGAAAAGGGTT
*****CGCAATGCGGATATCAATGT*****
.....TGAATGATGCGCAATGCGGATA..... ath-miR2112-5p 21
.....AATGATGCGCAATGCGGATA..... 1 24
.....ATGATGCGCAATGCGGATA..... 54 21
.....ATGATGCGCAATGCGGATA..... 10 21
.....TGATGCGCAATGCGGATA..... 2 19
.....TGATGCGCAATGCGGATA..... 1 20
.....ATGCGCAATGCGGATATCAA..... 3 21
.....GCGCAATGCGGATATCAA..... 1 19
.....CGCAATGCGGATATCAATG..... 2 20
.....CGCAATGCGGATATCAATGT..... 17 21
.....GCAATGCGGATATCAATG..... 2 19
.....GCAATGCGGATATCAATGT..... 5 20
.....GCAATGCGGATATCAATGT..... 2 21
.....AAATGCGGATATCAATGTAAA..... 5 21
.....ATGCGGATATCAATGTAATC..... 1 21

```

Fig. S7

>osa-miR156d_MIMAT000621_Oryza_sativa_miR156d		
AGGTTCTTAATGACAAGTAAGGCAAGAAATTTCTAGCACGGAGAAGCTCTCATGAGATTGACAGAAGAGAGTGAGCACACGGCGTATGCCGGCATAAAATCTATCCCGTCTCGCCGGTCTCCTCTCTTTCT		
*****TGACAGAAGAGTGAAGC*****		osa-miR156d
.....TCTAATGACAAGTAAGGCAAGAA.....	.....AGATTGACAGAAGAGTGAAG.....	1 24
.....TAATGACAAGTAAGGCAAGAAAT.....	.....ATTGACAGAAGAGTGAAG.....	1 24
.....AAGTAAGGCAAGAAATTTCTAGC.....	.....TTGACAGAAGAGTGAAG.....	1 24
.....	.....TTGACAGAAGAGTGAAG.....	2 18
.....	.....ATTGACAGAAGAGTGAAG.....	15 20
.....	.....ATTGACAGAAGAGTGAAG.....	18 21
.....	.....ATTGACAGAAGAGTGAAG.....	1458 22
.....	.....ATTGACAGAAGAGTGAAG.....	4 23
.....	.....TTGACAGAAGAGTGAAG.....	9 18
.....	.....TTGACAGAAGAGTGAAG.....	749 19
.....	.....TTGACAGAAGAGTGAAG.....	661 20
.....	.....TTGACAGAAGAGTGAAG.....	351455 21
.....	.....TTGACAGAAGAGTGAAG.....	92 22
.....	.....TGACAGAAGAGTGAAG.....	486 18
.....	.....TGACAGAAGAGTGAAG.....	463 19
.....	.....TGACAGAAGAGTGAAG.....	164656 20
.....	.....TGACAGAAGAGTGAAG.....	437 21
.....	.....GACAGAAGAGTGAAG.....	7 18
.....	.....GACAGAAGAGTGAAG.....	3433 19
.....	.....GACAGAAGAGTGAAG.....	112 20
.....	.....ACAGAAGAGTGAAG.....	323 18
.....	.....ACAGAAGAGTGAAG.....	406 19
.....	.....ACAGAAGAGTGAAG.....	11 20
.....	.....CAGAAGAGTGAAG.....	6 18
.....	.....CAGAAGAGTGAAG.....	18 20
>osa-miR156f_MIMAT000623_Oryza_sativa_miR156f		
ATGTGGCTATGCTGTCTACTAATGGTTTCTGTTTCTGGTGGTGGCAGTTGACAGAAGAGTGAAGCAGACAGCGGCAGACTGCATGATCTATCAATCTCCCTCGACAGGATAGTAGAGAA		
*****TGACAGAAGAGTGAAGC*****		osa-miR156f
.....	.....CAGTGAAGAAGAGTGAAG.....	1 20
.....	.....CAGTGAAGAAGAGTGAAG.....	2 21
.....	.....GTTGACAGAAGAGTGAAG.....	1 22
.....	.....TTGACAGAAGAGTGAAG.....	9 18
.....	.....TTGACAGAAGAGTGAAG.....	749 19
.....	.....TTGACAGAAGAGTGAAG.....	661 20
.....	.....TTGACAGAAGAGTGAAG.....	351455 21
.....	.....TTGACAGAAGAGTGAAG.....	92 22
.....	.....TGACAGAAGAGTGAAG.....	486 18
.....	.....TGACAGAAGAGTGAAG.....	463 19
.....	.....TGACAGAAGAGTGAAG.....	164656 20
.....	.....TGACAGAAGAGTGAAG.....	437 21
.....	.....TGACAGAAGAGTGAAG.....	2 24
.....	.....GACAGAAGAGTGAAG.....	7 18
.....	.....GACAGAAGAGTGAAG.....	3433 19
.....	.....GACAGAAGAGTGAAG.....	112 20
.....	.....GACAGAAGAGTGAAG.....	1 23
.....	.....ACAGAAGAGTGAAG.....	323 18
.....	.....ACAGAAGAGTGAAG.....	406 19
.....	.....ACAGAAGAGTGAAG.....	11 20
.....	.....CAGAAGAGTGAAG.....	6 18
.....	.....CAGAAGAGTGAAG.....	20 22
.....	.....TGACACAGCGCCAGACTG.....	2 22
>osa-miR156g_MIMAT000624_Oryza_sativa_miR156g		
TCGTGGATGATGGACGGATGTGGGGGACGAGAACCATGGCGGTGGCCCGCGCTGCCTGACAGAAGAGTGAAGCAGACAGCGGCAGACTGCATGAATTAACCTGTTGCACGAAGAAGACGACGGACCGAGCTT		
*****TGACAGAAGAGTGAAGC*****		osa-miR156g
.....	.....TGCTGACAGAAGAGTGAAG.....	1 21
.....	.....CTGACAGAAGAGTGAAG.....	1 19
.....	.....CTGACAGAAGAGTGAAG.....	2 20
.....	.....CTGACAGAAGAGTGAAG.....	688 21
.....	.....CTGACAGAAGAGTGAAG.....	2 22
.....	.....TGACAGAAGAGTGAAG.....	486 18
.....	.....TGACAGAAGAGTGAAG.....	463 19
.....	.....TGACAGAAGAGTGAAG.....	164656 20
.....	.....TGACAGAAGAGTGAAG.....	437 21
.....	.....TGACAGAAGAGTGAAG.....	2 24
.....	.....GACAGAAGAGTGAAG.....	7 18
.....	.....GACAGAAGAGTGAAG.....	3433 19
.....	.....GACAGAAGAGTGAAG.....	112 20
.....	.....GACAGAAGAGTGAAG.....	1 23
.....	.....ACAGAAGAGTGAAG.....	323 18
.....	.....ACAGAAGAGTGAAG.....	406 19
.....	.....ACAGAAGAGTGAAG.....	11 20
.....	.....CAGAAGAGTGAAG.....	6 18
.....	.....AGAGTGAAGCAGACAGCGGCAG.....	2 22
.....	.....ACAGCGGCAGACTGCATCTGAA.....	1 23
>osa-miR162a_MIMAT000632_Oryza_sativa_miR162a		
GTGTTCTTTTTTCTCTCTTTGGTCTTGTGCGAGCCAAACAAGCCGGGAATCATGATAAACCCTGCGATCAGTCTCGCCCTTTTGTGTTCAAGGGCTGAGGCAGTAGTACTGGCTATTGCTCTTCTGCTTC		
*****TCGATAAACCTCTGCATCCAG*****		osa-miR162a
.....	.....TCGATAAACCTCTGCATCC.....	1 19
.....	.....TCGATAAACCTCTGCATCC.....	1 20
.....	.....TCGATAAACCTCTGCATCC.....	561 21
.....	.....TCGATAAACCTCTGCATCC.....	2 22
.....	.....TCGATAAACCTCTGCATCC.....	1 23
.....	.....CGATAAACCTCTGCATCC.....	6 20
.....	.....CGATAAACCTCTGCATCC.....	1 21
.....	.....GATAAACCTCTGCATCC.....	10 19
>osa-miR166a_MIMAT000635_Oryza_sativa_miR166a		
CACCTTGGGTTTGGAGGATTTGTCGAAGTTTTTATTCTCTCATCCGTTGGATCTGGACAGGCTTATCCCTCAGAGTAGCTCAAAACATAGATCTATAGTCTCGCTATTATTCTTCACTTCTTC		
*****TCGGACAGGCTTCAATCC*****		osa-miR166a
.....	.....TCTCATCCGTTGGATCTGGAC.....	1 23
.....	.....ATCTGGACAGGCTTCAATCC.....	4 22
.....	.....ATCTGGACAGGCTTCAATCC.....	1 24
.....	.....TCTGGACAGGCTTCAAT.....	14 18
.....	.....TCTGGACAGGCTTCAAT.....	13 19
.....	.....TCTGGACAGGCTTCAAT.....	26 20
.....	.....TCTGGACAGGCTTCAAT.....	3084 21
.....	.....TCTGGACAGGCTTCAAT.....	1 22
.....	.....CTGGACAGGCTTCAAT.....	4 19
.....	.....CTGGACAGGCTTCAAT.....	139 20
.....	.....CTGGACAGGCTTCAAT.....	16 21
.....	.....CTGGACAGGCTTCAAT.....	106 22

```

.....TCGGACCAGGCTTCATTC..... 267 18
.....TCGGACCAGGCTTCATTC..... 715 19
.....TCGGACCAGGCTTCATCCC..... 770 20
.....TCGGACCAGGCTTCATCCCC..... 30003 21
.....TCGGACCAGGCTTCATCCCT..... 35 22
.....CGACCAGGCTTCATTC..... 14 18
.....CGACCAGGCTTCATCCC..... 43 19
.....CGACCAGGCTTCATCCCC..... 647 20
.....CGACCAGGCTTCATCCCT..... 3 21
.....CGACCAGGCTTCATCCCC..... 33 18
.....CGACCAGGCTTCATCCCC..... 280 19
.....TCATCCCCCTCAGAGTAGCTT..... 1 23

```

```

>osa-miR166b_MIMAT0000636_Oryza_sativa_miR166b
TCTCAATCGATCTTAAGAAAAAGATCAGTCAAGAGATGAGATGATGTCTGTAGATCTGGACCAGGCTTCATCCCCCAACAGAAGGGCTCCCATGCATATCGATCATGAGCTAGCTTATACCCCTGTCTTTG
*****TCGGACCAGGCTTCATCCCC*****osa-miR166b 21
.....ATCTCGACCAGGCTTCATTC..... 4 22
.....ATCTCGACCAGGCTTCATCCCC..... 1 24
.....TCTCGACCAGGCTTCAT..... 14 18
.....TCTCGACCAGGCTTCATT..... 13 19
.....TCTCGACCAGGCTTCATTC..... 26 20
.....TCTCGACCAGGCTTCATTC..... 3084 21
.....TCTCGACCAGGCTTCATCCC..... 1 22
.....CTCGACCAGGCTTCATTC..... 4 19
.....CTCGACCAGGCTTCATCCC..... 139 20
.....CTCGACCAGGCTTCATCCC..... 16 21
.....CTCGACCAGGCTTCATCCCC..... 106 22
.....TCGGACCAGGCTTCATTC..... 267 18
.....TCGGACCAGGCTTCATTC..... 715 19
.....TCGGACCAGGCTTCATCCCC..... 770 20
.....TCGGACCAGGCTTCATCCCC..... 30003 21
.....TCGGACCAGGCTTCATCCCC..... 2 22
.....CGACCAGGCTTCATTC..... 14 18
.....CGACCAGGCTTCATCCCC..... 43 19
.....CGACCAGGCTTCATCCCC..... 647 20
.....CGACCAGGCTTCATCCCC..... 1 21
.....GGACCAGGCTTCATCCC..... 33 18
.....GGACCAGGCTTCATCCCC..... 280 19

```

```

>osa-miR166c_MIMAT0000637_Oryza_sativa_miR166c
GACCTAACACCCGGCGGAATGGCGATTGAGCTGACGTAAGCAAGCTAGGTGGGGGTTTCGGACCAGGCTTCATCCCCCAACTCACTGTTAGTCTTCGGCTTCGGCACAATCGCGGGCGACATGCCAGCGT
*****TCGGACCAGGCTTCATCCCC*****osa-miR166c 21
.....TGGGGGTTTCGGACCAGG..... 1 20
.....GTTTCGGACCAGGCTTCATTC..... 1 21
.....GTTTCGGACCAGGCTTCATCCCC..... 1 24
.....TTTCGGACCAGGCTTCATTC..... 21 21
.....TTTCGGACCAGGCTTCATCCC..... 19 22
.....TTTCGGACCAGGCTTCATT..... 12 18
.....TTTCGGACCAGGCTTCATTC..... 115 19
.....TTTCGGACCAGGCTTCATCCC..... 70 20
.....TTTCGGACCAGGCTTCATCCCC..... 16400 21
.....TTTCGGACCAGGCTTCATCCCC..... 46 22
.....TTTCGGACCAGGCTTCATCCCC..... 1 23
.....TCGGACCAGGCTTCATTC..... 267 18
.....TCGGACCAGGCTTCATTC..... 715 19
.....TCGGACCAGGCTTCATCCCC..... 770 20
.....TCGGACCAGGCTTCATCCCC..... 30003 21
.....TCGGACCAGGCTTCATCCCC..... 2 22
.....CGACCAGGCTTCATTC..... 14 18
.....CGACCAGGCTTCATCCC..... 43 19
.....CGACCAGGCTTCATCCCC..... 647 20
.....GGACCAGGCTTCATCCCC..... 1 21
.....GGACCAGGCTTCATCCCC..... 33 18
.....GGACCAGGCTTCATCCCC..... 280 19
.....TTCTCGGCTTCGGCACAATC..... 1 22

```

```

>osa-miR166d_MIMAT0000638_Oryza_sativa_miR166d
CTGGCTCGAGGTGCATGGAGAACTCTGATCGATCGGTTGATCTGTAGAGACTGATCTGGACCAGGCTTCATCCCCCAAGTAAAGCTCCCATATTTATATGCTCTGCTGATCGATCGATCTCCGCGTT
*****TCGGACCAGGCTTCATCCCC*****osa-miR166d 21
.....ATCTCGACCAGGCTTCATTC..... 4 22
.....ATCTCGACCAGGCTTCATCCCC..... 1 24
.....TCTCGACCAGGCTTCAT..... 14 18
.....TCTCGACCAGGCTTCATT..... 13 19
.....TCTCGACCAGGCTTCATTC..... 26 20
.....TCTCGACCAGGCTTCATTC..... 3084 21
.....TCTCGACCAGGCTTCATCCC..... 1 22
.....CTCGACCAGGCTTCATTC..... 4 19
.....CTCGACCAGGCTTCATCCC..... 139 20
.....CTCGACCAGGCTTCATCCCC..... 16 21
.....CTCGACCAGGCTTCATCCCC..... 106 22
.....TCGGACCAGGCTTCATTC..... 267 18
.....TCGGACCAGGCTTCATTC..... 715 19
.....TCGGACCAGGCTTCATCCCC..... 770 20
.....TCGGACCAGGCTTCATCCCC..... 30003 21
.....TCGGACCAGGCTTCATCCCT..... 35 22
.....CGACCAGGCTTCATTC..... 14 18
.....CGACCAGGCTTCATCCCC..... 43 19
.....CGACCAGGCTTCATCCCC..... 647 20
.....CGACCAGGCTTCATCCCT..... 3 21
.....GGACCAGGCTTCATCCCC..... 33 18
.....GGACCAGGCTTCATCCCC..... 280 19

```

```

>osa-miR167b_MIMAT0000642_Oryza_sativa_miR167b
CGCGAGAGGTGTCATGTGTCGATCGAATCGAATCGATCTCCGGTCCCAAGAGAAAGCTGAAGCTGCCAGCATGATCTAACTTCGACAGAAGAAATCAGCTCAGCTCGCTGTTTCGAAAGGAGGGCTAGCTGAG
*****TGAAGCTGCCAGCATGATCTA*****osa-miR167b 21
.....GTAAGCTGCCAGCATGATCT..... 1 21
.....TGAAGCTGCCAGCATGAT..... 821 18
.....TGAAGCTGCCAGCATGATC..... 2947 19
.....TGAAGCTGCCAGCATGATCT..... 4149 20
.....TGAAGCTGCCAGCATGATCTA..... 252893 21
.....TGAAGCTGCCAGCATGATCTAA..... 328 22
.....TGAAGCTGCCAGCATGATCTAA..... 1 23
.....GAAGCTGCCAGCATGATC..... 31 18
.....GAAGCTGCCAGCATGATCT..... 31 19
.....GAAGCTGCCAGCATGATCTA..... 2088 20
.....GAAGCTGCCAGCATGATCTAA..... 5 21
.....AAGCTGCCAGCATGATCT..... 6 18
.....AAGCTGCCAGCATGATCTA..... 355 19

```

```

.....AGCTCCAGCATGATCTA..... 1 18

>osa-miR169a_MIMAT0000644_Oryza_sativa_miR169a
AAATTAAGCAGTAGCCGGGAATCGCCGGCCCTGACATTGGGATCGGAGGCCATGGTGCAGCCCAAGGACTTCCCGATCGATGATCTATATGAAGCTAAGTAGCTGGCCATGGATCCATCAATGGCAA
*****CAGCCAAGGATGACTTCCCGA*****
.....TTGGATCGGAGGCCATG..... 1 18
.....TTGGATCGGAGGCCATGGT..... 7 21
.....TTGGATCGGAGGCCATGGT..... 3 22
.....ATCGGAGGCCATGGTGC..... 34 21
.....GACCCAAGGATGACTTCCCG..... 3 21
.....CAGCCAAGGATGACTTCC..... 1 18
.....CAGCCAAGGATGACTTCC..... 1 19
.....CAGCCAAGGATGACTTCCGA..... 200 21
.....CAGCCAAGGATGACTTCCGATCG..... 6 24
.....AGCCAAGGATGACTTCCGA..... 5 20
.....AAGGATGACTTCCGATCG..... 1 19
.....AAGGATGACTTCCGATCGA..... 1 20
.....AAGGATGACTTCCGATCGAT..... 49 21
.....AAGGATGACTTCCGATCGG..... 77 23
.....AAGGATGACTTCCGATCGA..... 120 24
.....AAGGATGACTTCCGATCGAT..... 7 25
.....AGGATGACTTCCGATCGA..... 1 23

>osa-miR395i_MIMAT0000964_Oryza_sativa_miR395i
GGGAGTTCTTCAAGCCTTCACTAGAGCTTCTATTGACATGGAGCTTGAACAATGTGAAGTGTGGGGAACTTGGTACCAAGTGTATCGTGCTAGCAATGGTACTCTCAACGATAACTCATGTTGCA
*****GTGAAGTGTGGGGAACT*****
.....TGAACAATGTGAAGTGTGGGG..... 1 24
.....TGAAGTGTGGGGAACT..... 8 20

>osa-miR397a_MIMAT0000980_Oryza_sativa_miR397a
AAGGAGATGCAGATCATGTACAGAGGGCAAGTCGGATGGAAACAGAGAATCAATGCATCATTGAGTGCAGCGTTGATGAACAACGGTAACCGGTCATGTTGATGGCATTGGCCGGTATCGATCATCAGCG
*****TCATTGAGTGCAGCGTTGATG*****
.....ATCATTGAGTGCAGCGTTGAT..... 1 21
.....TCATTGAGTGCAGCGTTGAT..... 44 21
.....CATTGAGTGCAGCGTTGATGA..... 1 22
.....ATTGAGTGCAGCGTTGATGA..... 11 20
.....ATTGAGTGCAGCGTTGATGA..... 731 21
.....ATTGAGTGCAGCGTTGATGAAC..... 12 22
.....TTGAGTGCAGCGTTGATG..... 3 18
.....TTGAGTGCAGCGTTGATGA..... 6 19
.....TTGAGTGCAGCGTTGATGA..... 42 20
.....TTGAGTGCAGCGTTGATGAAC..... 1766 21
.....TTGAGTGCAGCGTTGATGAACA..... 11 22
.....TTGAGTGCAGCGTTGATGAACA..... 4 23
.....TGAGTGCAGCGTTGATGA..... 3 19
.....TGAGTGCAGCGTTGATGAAC..... 65 20
.....TGAGTGCAGCGTTGATGAACA..... 1 21
.....GAGTGCAGCGTTGATGA..... 2 18
.....GAGTGCAGCGTTGATGAAC..... 15 19
.....AGTGCAGCGTTGATGAAC..... 1 18

>osa-miR397b_MIMAT0000981_Oryza_sativa_miR397b
GCTAGGAATATTGGCAGATTATGATGAGATCGATGGGTGATGGAAGAGAAGGGAAGGCATTATTGAGTGCAGCGTTGATGAACAACCGCCGGCTAAATTAATAGCAAGAAAGTCTGAAACTGGCTCAAAGGTTCAAC
*****TTATTGAGTGCAGCGTTGATG*****
.....TAGGAATATTGGCAGATTAT..... 1 21
.....AATATTGGCAGATTATGATGA..... 1 22
.....ATATTGGCAGATTATGATGA..... 1 21
.....TATTGGCAGATTATGATGA..... 1 22
.....ATGATGAGATCGATGGGTGAT..... 1 21
.....ATGAGATCGATGGGTGATGA..... 2 21
.....TGGGTGATGGAAGAGAAGG..... 1 20
.....ATGGAAGAGAAGGGAAGGCATT..... 1 22
.....ATTGAGTGCAGCGTTGATGA..... 11 20
.....ATTGAGTGCAGCGTTGATGA..... 731 21
.....ATTGAGTGCAGCGTTGATGAAC..... 12 22
.....TTGAGTGCAGCGTTGATG..... 3 18
.....TTGAGTGCAGCGTTGATGA..... 6 19
.....TTGAGTGCAGCGTTGATGA..... 42 20
.....TTGAGTGCAGCGTTGATGAAC..... 1766 21
.....TTGAGTGCAGCGTTGATGAAC..... 632 22
.....TTGAGTGCAGCGTTGATGAACCT..... 1 23
.....TGAGTGCAGCGTTGATGA..... 3 19
.....TGAGTGCAGCGTTGATGAAC..... 65 20
.....TGAGTGCAGCGTTGATGAAC..... 13 21
.....GAGTGCAGCGTTGATGA..... 2 18
.....GAGTGCAGCGTTGATGAAC..... 15 19
.....GAGTGCAGCGTTGATGAAC..... 2 20
.....AGTGCAGCGTTGATGAAC..... 1 18
.....GTTGATGAACCTGCCCGCCG..... 1 22

>osa-miR159a.2_MIMAT000200_Oryza_sativa_miR159a.2
AAATGATGTGTAGTAGGAAATGATGGAGTACTGTTGTTGGATAGCTTATGGCTGATGCCAGGAGCTCATCAACCTACATGACCCCTTTGGATTGAAGGAGCTCGATCTTTGTCAACCTCGA
*****TTGATGCCAGGAGCTCA*****
.....GGCTTGCATGCCAGGAGCTC..... 1 23
.....CTTGCATGCCAGGAGCTG..... 1 20
.....CTTGCATGCCAGGAGCTC..... 57 21
.....CTTGCATGCCAGGAGCTCA..... 2 22
.....TTGATGCCAGGAGCT..... 2 18
.....TTGATGCCAGGAGCTG..... 3 19
.....TTGATGCCAGGAGCTC..... 2769 20
.....TTGATGCCAGGAGCTGCA..... 925 21
.....TTGATGCCAGGAGCTGCAT..... 39 22
.....TGCATGCCAGGAGCTC..... 127 19
.....TGCATGCCAGGAGCTCA..... 37 20
.....TGCATGCCAGGAGCTGCAT..... 4 21
.....GCATGCCAGGAGCTC..... 15 18
.....GCATGCCAGGAGCTGCA..... 5 19
.....AGGAGCTGCATCAACCTACA..... 1 21
.....GGAGCTGCATCAACCTACA..... 1 20
.....ATCAACCTACATGGACCC..... 1 19
.....ATCAACCTACATGGACCCCT..... 17 20
.....ATCAACCTACATGGACCCCT..... 14 21
.....ATCAACCTACATGGACCCCT..... 4 22
.....AACCTACATGGACCCCT..... 1 18
.....CTCTTTGGATTGAAGGAGC..... 1 21
.....CTCTTTGGATTGAAGGAGC..... 1 20
.....CTCTTTGGATTGAAGGAGCT..... 1 21

```

```

.....TCTTTGGATTGAAGGGAGCTC..... 3 21
.....CTTTGGATTGAAGGGAGC..... 4 18
.....CTTTGGATTGAAGGGAGCTCT..... 1 21
.....CTTTGGATTGAAGGGAGCTCTG..... 1 22
.....TTTGGATTGAAGGGAGCT..... 94 18
.....TTTGGATTGAAGGGAGCTC..... 23 19
.....TTTGGATTGAAGGGAGCTCT..... 8 20
.....TTTGGATTGAAGGGAGCTCTG..... 344 21
.....TTTGGATTGAAGGGAGCTCTGC..... 7 22
.....TTGGATTGAAGGGAGCTC..... 2 18
.....TTGGATTGAAGGGAGCTCTG..... 11 20
.....TTGGATTGAAGGGAGCTCTGC..... 10 21
.....TTGGATTGAAGGGAGCTCTGCA..... 1 22
.....TGGATTGAAGGGAGCTCTG..... 5 19

```

```

>osa-miR164e_MIMAT0001035_Oryza_sativa_miR164e
AGTCGATGATACATTGAGCTTGCATCGACGTATATATGTTGGTGTACTGTGCAGGTTGGAGAAGCAGGGCACGTGAGCGCCATCCAGTGTAGCTTGCCTGCGCTCCATGGCGGCAACGCCGTGATCTGGAGTT
*****TGGAGAAGCAGGGCACGTGAG*****
.....TGGAGAAGCAGGGCACGTG..... osa-miR164e 21
.....TGGAGAAGCAGGGCACGTG..... 9 19
.....TGGAGAAGCAGGGCACGTG..... 227 21
.....TGGAGAAGCAGGGCACGTGAGCGG..... 1 24
.....GGAGAAGCAGGGCACGTG..... 1 18
.....GGAGAAGCAGGGCACGTGAG..... 18 20

```

```

>osa-miR166k_MIMAT0001037_Oryza_sativa_miR166k
CGGGGACTCCGGTTTCTCCTTTCTACTGAGGCGCCTAATTTCCGGGAGCTCGGAGCCTCGACAGGCTTCAATCCCTTAAACATGCGGCATATGTCCTGTCAATTGATGATCTAGTCTTCTTGGCATGATCA
*****TGGACAGGCTTCAATCCCT*****
.....CTCGACAGGCTTCAATCCC..... osa-miR166k 21
.....CTCGACAGGCTTCAATCCCT..... 1 21
.....CTCGACAGGCTTCAATCCCT..... 3 22
.....TCGGACAGGCTTCAATC..... 26 18
.....TCGGACAGGCTTCAATCC..... 61 19
.....TCGGACAGGCTTCAATCCC..... 23 20
.....TCGGACAGGCTTCAATCCCT..... 2539 21
.....TCGGACAGGCTTCAATCCCT..... 6 22
.....TCGGACAGGCTTCAATCCCTT..... 1 23
.....CGACAGGCTTCAATCCCT..... 85 20
.....CGACAGGCTTCAATCCCT..... 2 21
.....GGACAGGCTTCAATCCCT..... 13 19

```

```

>osa-miR166l_MIMAT0001038_Oryza_sativa_miR166l
TTCAGGTCCACATTGTGCAAAATGTTCAATCATGAGGACAGAGTCTTGGTGTACTCGACAGGCTTCAATCCCTTAAACAGCATCTGCACAATATGCTCTCATCCGAGTGTGGTGCACCTGGTATGTTATATG
*****TGGACAGGCTTCAATCCCT*****
.....GTGATCTCGACAGGCTTCAATC..... osa-miR166l 21
.....TCTCGACAGGCTTCAATCCC..... 13 22
.....CTCGACAGGCTTCAATCCC..... 1 21
.....CTCGACAGGCTTCAATCCCT..... 3 22
.....TCGGACAGGCTTCAATC..... 26 18
.....TCGGACAGGCTTCAATCC..... 61 19
.....TCGGACAGGCTTCAATCCC..... 23 20
.....TCGGACAGGCTTCAATCCCT..... 2539 21
.....TCGGACAGGCTTCAATCCCTT..... 6 22
.....TCGGACAGGCTTCAATCCCTTT..... 1 23
.....CGACAGGCTTCAATCCCT..... 85 20
.....CGACAGGCTTCAATCCCT..... 2 21
.....GGACAGGCTTCAATCCCT..... 13 19
.....TCAATCCCTTAAACAGCAT..... 1 20

```

```

>osa-miR167d_MIMAT0001039_Oryza_sativa_miR167d
TTGGATCCAACTTAGATCTAAACACAGCCTTATTGTTGAGGTGCAACCATTAGGAGCTGAAGCTGCCAGCATGATCTGATGAGTCTTATTAGGTGAGGGCAGAATTGACTGCCAAAACAAGATCAGATCATGCTGT
*****TGAAGCTGCCAGCATGATCTG*****
.....AACTTTAGATCTAAACAC..... osa-miR167d 21
.....AACTTTAGATCTAAACACAGCCT..... 1 19
.....AACTTTAGATCTAAACACAGCCT..... 1 24
.....AACTTTAGATCTAAACACAGCCT..... 1 23
.....CTGAAGCTGCCAGCATGA..... 2 18
.....CTGAAGCTGCCAGCATGAT..... 1 19
.....CTGAAGCTGCCAGCATGATC..... 6 20
.....CTGAAGCTGCCAGCATGATCT..... 2 21
.....CTGAAGCTGCCAGCATGATCTG..... 17 22
.....CTGAAGCTGCCAGCATGATCTGA..... 842 23
.....CTGAAGCTGCCAGCATGATCTGAT..... 1 24
.....TGAAGCTGCCAGCATGAT..... 821 18
.....TGAAGCTGCCAGCATGATC..... 2947 19
.....TGAAGCTGCCAGCATGATCT..... 4149 20
.....TGAAGCTGCCAGCATGATCTG..... 7236 21
.....TGAAGCTGCCAGCATGATCTGA..... 703870 22
.....TGAAGCTGCCAGCATGATCTGAT..... 778 23
.....TGAAGCTGCCAGCATGATCTGATG..... 1 24
.....GAAGCTGCCAGCATGATC..... 31 18
.....GAAGCTGCCAGCATGATCT..... 31 19
.....GAAGCTGCCAGCATGATCTG..... 27 20
.....GAAGCTGCCAGCATGATCTGA..... 8836 21
.....GAAGCTGCCAGCATGATCTGAT..... 21 22
.....AAGCTGCCAGCATGATCT..... 6 18
.....AAGCTGCCAGCATGATCTG..... 2 19
.....AAGCTGCCAGCATGATCTGA..... 734 20
.....AAGCTGCCAGCATGATCTGAT..... 1 21
.....AAGCTGCCAGCATGATCTGATG..... 1 22
.....AGCTGCCAGCATGATCTGA..... 3 19
.....AGCTGCCAGCATGATCTGATGA..... 5 22

```

```

>osa-miR167e_MIMAT0001040_Oryza_sativa_miR167e
TGTGATTAACCTTGTCTCATGTTCTTGAAGAAGGAAGTTTGTGGTGTGAGAGAATGAAGCTGCCAGCATGATCTGTTGTGAGCATGAGCAGCAATATCATGAGTGTGGTGGTCAAAATCCCGCTTTT
*****TGAAGCTGCCAGCATGATCTG*****
.....TGGTGTGAGAGAATGAAGCTG..... osa-miR167e 21
.....TGAGAGAATGAAGCTGCCAGC..... 1 21
.....AGAATGAAGCTGCCAGCATGAT..... 1 21
.....AATGAAGCTGCCAGCATGATCT..... 1 22
.....ATGAAGCTGCCAGCATGATCT..... 4 22
.....ATGAAGCTGCCAGCATGATCTG..... 1 21
.....TGAAGCTGCCAGCATGAT..... 6 22
.....TGAAGCTGCCAGCATGATC..... 821 18
.....TGAAGCTGCCAGCATGATCT..... 2947 19
.....TGAAGCTGCCAGCATGATCTG..... 4149 20
.....TGAAGCTGCCAGCATGATCTG..... 7236 21
.....TGAAGCTGCCAGCATGATCTG..... 900 22
.....TGAAGCTGCCAGCATGATCTGTT..... 3 23
.....GAAGCTGCCAGCATGATC..... 31 18

```

```

.....GAAGCTGCCAGCATGATCT..... 31 19
.....GAAGCTGCCAGCATGATCTG..... 27 20
.....GAAGCTGCCAGCATGATCTGG..... 5 21
.....AAGCTGCCAGCATGATCT..... 6 18
.....AAGCTGCCAGCATGATCTG..... 2 19
.....AAGCTGCCAGCATGATCTGG..... 2 20

```

```

>osa-miR167f_MIMAT0001041_Oryza_sativa_miR167f
CTCTCTCTCTCTCTCTCTCTCTCTCTCTCTCATATGATGGTGCCACACAAGTGGTGAAGCTGCCAGCATGATCTGATCACAGTAGTCTCTAGCTGATGATGATTACAAACCTAGAGACATGCATCAGATCAT
*****TGAAGCTGCCAGCATGATCTG*****
.....GATGAAGCTGCCAGCATGATCT..... osa-miR167f 21
.....ATGAAGCTGCCAGCATGATCT..... 1 21
.....ATGAAGCTGCCAGCATGATCTG..... 6 22
.....ATGAAGCTGCCAGCATGATCTGA..... 6 23
.....ATGAAGCTGCCAGCATGATCTGAT..... 1 24
.....TGAAGCTGCCAGCATGAT..... 821 18
.....TGAAGCTGCCAGCATGATC..... 2947 19
.....TGAAGCTGCCAGCATGATCT..... 4149 20
.....TGAAGCTGCCAGCATGATCTG..... 7236 21
.....TGAAGCTGCCAGCATGATCTGA..... 703870 22
.....TGAAGCTGCCAGCATGATCTGAT..... 778 23
.....TGAAGCTGCCAGCATGATCTGATC..... 5 24
.....GAAGCTGCCAGCATGATC..... 31 18
.....GAAGCTGCCAGCATGATCT..... 31 19
.....GAAGCTGCCAGCATGATCTG..... 27 20
.....GAAGCTGCCAGCATGATCTGA..... 8836 21
.....GAAGCTGCCAGCATGATCTGAT..... 21 22
.....AAGCTGCCAGCATGATCT..... 6 18
.....AAGCTGCCAGCATGATCTG..... 2 19
.....AAGCTGCCAGCATGATCTGA..... 734 20
.....AAGCTGCCAGCATGATCTGAT..... 1 21
.....AAGCTGCCAGCATGATCTGATC..... 1 22
.....AGCTGCCAGCATGATCTGA..... 3 19

```

```

>osa-miR167g_MIMAT0001042_Oryza_sativa_miR167g
CGATTATGGAGGTAGATGAGATGGCTGTTAATTCCTCTTTTGTGGCCCATAGCAGGTGAAGCTGCCAGCATGATCTGAAAGCATCTCAACACAGGATCAGATGATCCGGAGCTTCTCTCTCATGGCAGCACAC
*****TGAAGCTGCCAGCATGATCTG*****
.....AGGTGAAGCTGCCAGCATGATCTGA..... osa-miR167g 21
.....GTGAAGCTGCCAGCATGATCT..... 2 25
.....TGAAGCTGCCAGCATGAT..... 1 21
.....TGAAGCTGCCAGCATGAT..... 821 18
.....TGAAGCTGCCAGCATGATC..... 2947 19
.....TGAAGCTGCCAGCATGATCT..... 4149 20
.....TGAAGCTGCCAGCATGATCTG..... 7236 21
.....TGAAGCTGCCAGCATGATCTGA..... 703870 22
.....TGAAGCTGCCAGCATGATCTGAA..... 6567 23
.....TGAAGCTGCCAGCATGATCTGAAA..... 17941 24
.....TGAAGCTGCCAGCATGATCTGAAAG..... 1 25
.....TGAAGCTGCCAGCATGATCTGAAAGC..... 6 26
.....TGAAGCTGCCAGCATGATCTGAAAGCATG..... 1 29
.....GAAGCTGCCAGCATGATC..... 31 18
.....GAAGCTGCCAGCATGATCT..... 31 19
.....GAAGCTGCCAGCATGATCTG..... 27 20
.....GAAGCTGCCAGCATGATCTGA..... 8836 21
.....GAAGCTGCCAGCATGATCTGAA..... 71 22
.....GAAGCTGCCAGCATGATCTGAAA..... 74 23
.....AAGCTGCCAGCATGATCT..... 6 18
.....AAGCTGCCAGCATGATCTG..... 2 19
.....AAGCTGCCAGCATGATCTGA..... 734 20
.....AAGCTGCCAGCATGATCTGAA..... 8 21
.....AAGCTGCCAGCATGATCTGAAA..... 12 22
.....AAGCTGCCAGCATGATCTGAAAGCA..... 1 25
.....AGCTGCCAGCATGATCTGA..... 3 19
.....AGCTGCCAGCATGATCTGA..... 10 21
.....AGATCATCCGGAGCTTCTATC..... 2 20
.....GATCATCCGGAGCTTCTATC..... 2 19
.....TCATCCGGAGCTTCTATC..... 56 21
.....CATCCGGAGCTTCTATC..... 1 20

```

```

>osa-miR167h_MIMAT0001043_Oryza_sativa_miR167h
CTCTCTCTCTCCATGAAAGCTAGGAAATTAAGTAAAGGCAAGTGGTGCCACACAAGTGGTGAAGCTGCCAGCATGATCTGATGATGATGATCACCTCTCTCATCTGTTCTTGATTAATACGGATCAATCGATC
*****TGAAGCTGCCAGCATGATCTG*****
.....GTGAAGCTGCCAGCATGATCT..... osa-miR167h 21
.....TGAAGCTGCCAGCATGAT..... 821 18
.....TGAAGCTGCCAGCATGATC..... 2947 19
.....TGAAGCTGCCAGCATGATCT..... 4149 20
.....TGAAGCTGCCAGCATGATCTG..... 7236 21
.....TGAAGCTGCCAGCATGATCTGA..... 703870 22
.....TGAAGCTGCCAGCATGATCTGAT..... 778 23
.....TGAAGCTGCCAGCATGATCTGATG..... 1 24
.....GAAGCTGCCAGCATGATC..... 31 18
.....GAAGCTGCCAGCATGATCT..... 31 19
.....GAAGCTGCCAGCATGATCTG..... 27 20
.....GAAGCTGCCAGCATGATCTGA..... 8836 21
.....GAAGCTGCCAGCATGATCTGAT..... 21 22
.....AAGCTGCCAGCATGATCT..... 6 18
.....AAGCTGCCAGCATGATCTG..... 2 19
.....AAGCTGCCAGCATGATCTGA..... 734 20
.....AAGCTGCCAGCATGATCTGAT..... 1 21
.....AAGCTGCCAGCATGATCTGATG..... 1 22
.....AGCTGCCAGCATGATCTGA..... 3 19
.....AGCTGCCAGCATGATCTGATGA..... 5 20

```

```

>osa-miR167i_MIMAT0001044_Oryza_sativa_miR167i
TGTGTTGAGCAGCATTTTCTTTGGTCAGAAGATATTAGTCTGCTGGTGTGAGAGCTGAAGCTGCCAGCATGATCTGGTCCATGAGTTGCACCTGCTGAATATTTGAATTCAGCCAGGAGCTACTGCAGTTCTG
*****TGAAGCTGCCAGCATGATCTG*****
.....CTGAAGCTGCCAGCATGA..... osa-miR167i 21
.....CTGAAGCTGCCAGCATGAT..... 1 19
.....CTGAAGCTGCCAGCATGATC..... 6 20
.....CTGAAGCTGCCAGCATGATCT..... 2 21
.....CTGAAGCTGCCAGCATGATCTG..... 17 22
.....CTGAAGCTGCCAGCATGATCTGG..... 1 23
.....TGAAGCTGCCAGCATGAT..... 821 18
.....TGAAGCTGCCAGCATGATC..... 2947 19
.....TGAAGCTGCCAGCATGATCT..... 4149 20
.....TGAAGCTGCCAGCATGATCTG..... 7236 21
.....TGAAGCTGCCAGCATGATCTGG..... 900 22
.....TGAAGCTGCCAGCATGATCTGGT..... 3 23
.....GAAGCTGCCAGCATGATC..... 31 18

```

```

.....GAAGCTGCCAGCATGATCT..... 31 19
.....GAAGCTGCCAGCATGATCTG..... 27 20
.....GAAGCTGCCAGCATGATCTGG..... 5 21
.....AAGCTGCCAGCATGATCT..... 6 18
.....AAGCTGCCAGCATGATCTG..... 2 19
.....AAGCTGCCAGCATGATCTGG..... 2 20

```

```

>osa-miR168a_MIMAT0001045_Dryza_sativa_miR168a
CTCCCTCTCGAGAGACACCGCGCTCTGCTCTCATGTGCGCCGCCCTGGGCTCCTTGTGTGCAGATCGGGACCGCGCCGCTGCCGGGCGGATCCCGCTTGACCAAGTGAATCGAGCCGGCGT
*****TCCCTTGTGTGCAGATCGGGAC*****
.....CTCCTTGTGTGCAGATCGGGA..... 6 21
.....CTCCTTGTGTGCAGATCGGGAC..... 250 22
.....TCGCTTGTGTGCAGATCGGG..... 4 18
.....TCGCTTGTGTGCAGATCGGG..... 204 19
.....TCGCTTGTGTGCAGATCGGGA..... 1576 20
.....TCGCTTGTGTGCAGATCGGGAC..... 663911 21
.....TCGCTTGTGTGCAGATCGGGACC..... 1006 22
.....TCGCTTGTGTGCAGATCGGGACCC..... 46 23
.....TCGCTTGTGTGCAGATCGGGACCCG..... 99 24
.....CGCTTGTGTGCAGATCGGGA..... 11 19
.....CGCTTGTGTGCAGATCGGGAC..... 2114 20
.....CGCTTGTGTGCAGATCGGGACC..... 6 21
.....CGCTTGTGTGCAGATCGGGACCC..... 1 22
.....CGCTTGTGTGCAGATCGGGACCCG..... 1 23
.....GCTTGTGTGCAGATCGGGA..... 3 18
.....GCTTGTGTGCAGATCGGGAC..... 507 19
.....CTTGTGTGCAGATCGGGAC..... 10 18
.....TTGTGTGCAGATCGGGACCCG..... 3 21
.....TGGTGTGCAGATCGGGACCCG..... 1 20
.....TGGTGTGCAGATCGGGACCCGC..... 99 21
.....GATCCCGCTTGACCAA..... 1 18
.....GATCCCGCTTGACCAAAGTGAA..... 3 23
.....GATCCCGCTTGACCAAAGTGAA..... 74 24
.....TCCCGCTTGACCAAAGTGAA..... 1 21
.....TCCCGCTTGACCAAAGTGAA..... 2 22
.....CCCGCTTGACCAAAGTGAA..... 5 20
.....CCCGCTTGACCAAAGTGAA..... 73 21
.....CCCGCTTGACCAAAGTGAA..... 11 20
.....CCCGCTTGACCAAAGTGAA..... 4 19
.....CTTGACCAAAGTGAA..... 3 21

```

```

>osa-miR169h_MIMAT0001053_Dryza_sativa_miR169h
TGTAACATATTTGTACTAAGAGACAAGGCTTACATGGAGACAAGGTTTAGCTCTGTGAGCAAGGATGACTTGCCTGTCTGTGTGTAAGGATCATTAAATATTATTCAGAAAATGATCCTTTCAGCAGGTTTC
*****TAGCCAAGGATGACTTGCCTG*****
.....GGTAGCCAAGGATGACTTGCCTG..... 2 23
.....TAGCCAAGGATGACTTGCCT..... 3 20
.....TAGCCAAGGATGACTTGCCTG..... 33 21
.....TAGCCAAGGATGACTTGCCTGT..... 1 22
.....TAGCCAAGGATGACTTGCCTGTG..... 2 23
.....AGCCAAGGATGACTTGCCTG..... 1 20

```

```

>osa-miR169i_MIMAT0001054_Dryza_sativa_miR169i
AGTTAATTTCTGGAGATGGAAGAGACAAGGCTTACATGGAGACAAGGTTTAGCTCTGTGAGCAAGGATGACTTGCCTGTCTGTGTGTAAGGATCATTAAATATTATTCAGAAAATGATCCTTTCAGCAGGTTTC
*****TAGCCAAGGATGACTTGCCTG*****
.....TGGTGATAAAGGTTAGCTCTG..... 1 23
.....TGGTGATAAAGGTTAGCTCTG..... 1 28
.....GGTAGCCAAGGATGACTTGCCTG..... 2 23
.....TAGCCAAGGATGACTTGCCT..... 3 20
.....TAGCCAAGGATGACTTGCCTG..... 33 21
.....TAGCCAAGGATGACTTGCCTGT..... 1 22
.....TAGCCAAGGATGACTTGCCTGTG..... 2 23
.....AGCCAAGGATGACTTGCCTG..... 1 20
.....GAGGATCATTAGAAAATGAGCC..... 1 23

```

```

>osa-miR169j_MIMAT0001055_Dryza_sativa_miR169j
GAGAAGAAAGAAAGAAAGAAAGAGAGGCTCGATGCGCAGTAGAGCTCGCATCTGTGAGCAAGGATGACTTGCCTGTCTGTCTCATGTGAGCAAGGATGACTTTCAGTCTGATATGTGAT
*****TAGCCAAGGATGACTTGCCTG*****
.....GGTAGCCAAGGATGACTTGCCTG..... 2 23
.....TAGCCAAGGATGACTTGCCT..... 3 20
.....TAGCCAAGGATGACTTGCCTG..... 33 21
.....TAGCCAAGGATGACTTGCCTGT..... 1 22
.....TAGCCAAGGATGACTTGCCTGTG..... 2 23
.....AGCCAAGGATGACTTGCCTG..... 1 20

```

```

>osa-miR169k_MIMAT0001056_Dryza_sativa_miR169k
AAACAGAGCCAAACACACACAAGAGAGAGAGATGAAATGATAAGGATCTGTCTAGATGCAAGGATGACTTGCCTGTGCGCCCTTGGAGAGAGAGGTAGCTTAATTAGCAGCATGTTTGGAGCATGCTTGTGATC
*****TAGCCAAGGATGACTTGCCTG*****
.....GATAGCCAAGGATGACTTGCCTG..... 1 23
.....TAGCCAAGGATGACTTGCCT..... 3 20
.....TAGCCAAGGATGACTTGCCTG..... 33 21
.....TAGCCAAGGATGACTTGCCTGT..... 1 22
.....TAGCCAAGGATGACTTGCCTGTG..... 2 23
.....AGCCAAGGATGACTTGCCTG..... 1 20

```

```

>osa-miR169l_MIMAT0001057_Dryza_sativa_miR169l
CTAGATGAAGCAAAAGAGAGAGAGGCTTACATGGATGCGCAGTAAGGACTTATCTCTGATAGCAAGGATGACTTGCCTGTCTCTCCCTGAAGATTAGCAATTAATGATCCTTTAAGCTGTTTATGGGAGTCTCC
*****TAGCCAAGGATGACTTGCCTG*****
.....TGGATGCCAGTAAGGACTTAT..... 1 21
.....TGGATGCCAGTAAGGACTTATCTCT..... 1 25
.....TGGATGCCAGTAAGGACTTATCTCTG..... 1 26
.....TGGATGCCAGTAAGGACTTATCTCTGA..... 3 27
.....TGGCAGTAAGGACTTATCTCTGA..... 1 23
.....GATAGCCAAGGATGACTTGCCTG..... 1 23
.....TAGCCAAGGATGACTTGCCT..... 3 20
.....TAGCCAAGGATGACTTGCCTG..... 33 21
.....TAGCCAAGGATGACTTGCCTGT..... 1 22
.....TAGCCAAGGATGACTTGCCTGTG..... 2 23
.....AGCCAAGGATGACTTGCCTG..... 1 20

```

```

>osa-miR169m_MIMAT0001058_Dryza_sativa_miR169m
TTGATATTGAAAGAAATAGAGATGATGCTTACATGGTGTGAGAGGTAGCTGTGAGCAAGGATGACTTGCCTGTATATTATATATATATGTGTGTGATCAATGATGATCAAGCTGCTTGCAGCC
*****TAGCCAAGGATGACTTGCCTG*****
.....GGTAGCCAAGGATGACTTGCCTG..... 2 23
.....TAGCCAAGGATGACTTGCCT..... 3 20
.....TAGCCAAGGATGACTTGCCTG..... 33 21

```


.....TAGCCAAGGATGACTGCCTGT..... 1 22
.....AGCCAAGGATGACTGCCTG..... 1 20

>osa-miR171d_MIMAT0001065_Oryza_sativa_miR171d
TGCAGAAGAGTGCATGAATCTGATGAGCTCAGTGTAGTATGCTCCATGGAACTTCTGATTGAGCCGTGCCAATATCTCAGCACATTTTATGCAATCATGCTACAGATCACTCCCAAAGTCTCAATTTACCATC
*****TGATTGAGCCGTGCCAATATC*****
.....ACTTCTGATTGAGCCGTGCCA..... 1 21
.....TTCTGATTGAGCCGTGCCAATATC..... 1 24
.....CTGATTGAGCCGTGCCAATATC..... 1 20
.....TGATTGAGCCGTGCCAAT..... 3 22
.....TGATTGAGCCGTGCCAAT..... 4 18
.....TGATTGAGCCGTGCCAATAT..... 4 19
.....TGATTGAGCCGTGCCAATAT..... 1 20
.....TGATTGAGCCGTGCCAATAT..... 201 21
.....GATTGAGCCGTGCCAATATC..... 3 20

>osa-miR171e_MIMAT0001066_Oryza_sativa_miR171e
TCAGACGGATTGGCTGATGCAAGCATGATGCGTCTGTAGCTCCTTGTCTTCTGATTGAGCCGTGCCAATATCTTAGTCTCTTATGCTGTACGTACGCGCACGCACGGTTGACCATGCATCGACGACGAC
*****TGATTGAGCCGTGCCAATATC*****
.....TTTCTGATTGAGCCGTGCCA..... 1 20
.....TTCTGATTGAGCCGTGCCAATATC..... 1 24
.....CTGATTGAGCCGTGCCAATATC..... 1 20
.....CTGATTGAGCCGTGCCAATATC..... 3 22
.....TGATTGAGCCGTGCCAAT..... 4 18
.....TGATTGAGCCGTGCCAATAT..... 4 19
.....TGATTGAGCCGTGCCAATAT..... 1 20
.....TGATTGAGCCGTGCCAATATC..... 201 21
.....GATTGAGCCGTGCCAATATC..... 3 20

>osa-miR393b_MIMAT0001078_Oryza_sativa_miR393b
GGTGTAGTGCCTAATCAACCGCCGACATATATGCGCCCTGAGGAACTAGTGGAGACTCCAAAGGATCGCATGTGCTGGCTAGCTATCTCGATGATGCTCCTCATGATCGACGACGACGTGGCTGATCGATGATG
*****TCCAAAGGATCGCATTGATCT*****
.....AGTGAGGACTCCAAAGGG..... 2 19
.....AGTGAGGACTCCAAAGGAT..... 11 21
.....GTGGAGGACTCCAAAGGAT..... 1 20
.....AGGACTCCAAAGGATCGCA..... 1 20
.....AGGACTCCAAAGGATCGCAT..... 1 21
.....AGGACTCCAAAGGATCGCATT..... 6 22
.....AGGACTCCAAAGGATCGCATTA..... 4 24
.....ACTCCAAAGGATCGCATTGA..... 1 21
.....CTCCAAAGGATCGCATTGA..... 7 20
.....CTCCAAAGGATCGCATTGAT..... 29 21
.....CTCCAAAGGATCGCATTGATC..... 1 22
.....TCCAAAGGATCGCATTG..... 1 18
.....TCCAAAGGATCGCATTGA..... 3 19
.....TCCAAAGGATCGCATTGAT..... 19 20
.....TCCAAAGGATCGCATTGATC..... 183 21
.....CAAAGGATCGCATTGATC..... 6 19
.....AAAGGATCGCATTGATC..... 4 18

>osa-miR167j_MIMAT0001086_Oryza_sativa_miR167j
GCCCTCTCTCACTCTTCACTCTCCATTAGCTTTGTGATGTGGACCTTAAGCAGCTGAAGCTGCCAGCATGATGTGATCTTTTGCATCTTTTTTATCTGAATAAGTTGATGAAATATGGGTTCTAAGAT
*****TGAAGCTGCCAGCATGATCTG*****
.....CTGAAGCTGCCAGCATGA..... 2 18
.....CTGAAGCTGCCAGCATGAT..... 1 19
.....CTGAAGCTGCCAGCATGATCT..... 6 20
.....CTGAAGCTGCCAGCATGATCT..... 2 21
.....CTGAAGCTGCCAGCATGATCTG..... 17 22
.....CTGAAGCTGCCAGCATGATCTGA..... 842 23
.....TGAAGCTGCCAGCATGATCTGAT..... 1 24
.....TGAAGCTGCCAGCATGAT..... 821 18
.....TGAAGCTGCCAGCATGATC..... 2947 19
.....TGAAGCTGCCAGCATGATCT..... 4149 20
.....TGAAGCTGCCAGCATGATCTG..... 7236 21
.....TGAAGCTGCCAGCATGATCTGA..... 703870 22
.....TGAAGCTGCCAGCATGATCTGAT..... 778 23
.....TGAAGCTGCCAGCATGATCTGATC..... 5 24
.....GAAGCTGCCAGCATGATC..... 31 18
.....GAAGCTGCCAGCATGATCT..... 31 19
.....GAAGCTGCCAGCATGATCTG..... 27 20
.....GAAGCTGCCAGCATGATCTGA..... 8836 21
.....GAAGCTGCCAGCATGATCTGAT..... 21 22
.....AAGCTGCCAGCATGATCT..... 6 18
.....AAGCTGCCAGCATGATCTG..... 2 19
.....AAGCTGCCAGCATGATCTGA..... 734 20
.....AAGCTGCCAGCATGATCTGAT..... 1 21
.....AAGCTGCCAGCATGATCTGATC..... 1 22
.....AGCTGCCAGCATGATCTGA..... 3 19

>osa-miR166m_MIMAT0001087_Oryza_sativa_miR166m
TTTCTTTGCTGAAATTCGATGAGTGTGTGTGATGATGCTGGTGGTGGACCTGGACAGGCTTCATCCCTTAACAGCATTTGCGTTAATACCATGAGCATGCTGCTCTGCAAGTTGACAACTGCT
*****CTGGACAGGCTTCATCCCT*****
.....CTGGACAGGCTTCATCC..... 1 21
.....CTGGACAGGCTTCATCC..... 4 19
.....CTGGACAGGCTTCATCC..... 139 20
.....CTGGACAGGCTTCATCCCT..... 16 21
.....CTGGACAGGCTTCATCC..... 267 18
.....CTGGACAGGCTTCATCC..... 715 19
.....CTGGACAGGCTTCATCCCT..... 770 20
.....CTGGACAGGCTTCATCCCT..... 123 21
.....CTGGACAGGCTTCATCCCT..... 9 22
.....CTGGACAGGCTTCATCCCTT..... 4 23
.....CGACAGGCTTCATCC..... 14 18
.....CGACAGGCTTCATCCCT..... 43 19
.....CGACAGGCTTCATCCCT..... 9 20
.....GACACAGGCTTCATCCCT..... 33 18
.....GACACAGGCTTCATCCCT..... 2 19
.....GACACAGGCTTCATCCCT..... 1 20

>osa-miR435_MIMAT0001585_Oryza_sativa_miR435
CGAAAATGCTTGAATAGCTTCAGACCTATAGTGTGTTGATGTTAGGGACATGTTTATCCGGTATTGGAGTTAGGGATGAAAATGGACCAAGTCAAGAGTTTATGGATGAAAGTAGACTTTACCTTTGCT
*****TTATCCGGTATTGGAGTTGA*****
.....TTATCCGGTATTGGAGTTGA..... 1 21
.....TTATCCGGTATTGGAGTTGA..... 75 20
.....TTATCCGGTATTGGAGTTGAGG..... 4 22
.....TTATCCGGTATTGGAGTTGAGGGA..... 1 24

```

.....TATCCGGTATTGGAGTTGAGG..... 1 21
.....ATCCGGTATTGGAGTTGAGGG..... 2 21
.....ATCCGGTATTGGAGTTGAGGGAT..... 1 23
.....CGTATTGGAGTTGAGGGAT..... 1 20
.....CGTATTGGAGTTGAGGGATG..... 21 21
.....CGTATTGGAGTTGAGGGATGAAA..... 3 24
.....GGTATTGGAGTTGAGGGATG..... 2 20
.....GGTATTGGAGTTGAGGGATGA..... 2 21
.....GGTATTGGAGTTGAGGGATGAAA..... 1 24
.....AGGGATGAAAATTGGACCAAG..... 1 21
.....GATGAAAATTGGACCAAGTCAAGA..... 2 24

```

```

>osa-miR437_MIMAT0001586_Oryza_sativa_miR437
ATCAAAATAAATACACTATTGACATATTTCTTAATAACTTGGTCAAAGTTAGAGAAGTTGACTTAGGCAAACTAAACCTTATGATGAAACAGAGGGTATACAATATAAGTTAGCAGTC
*****TGTGAACCGCGGTTGTCGA*****osa-miR437 21
.....TCAAAGTTAGAGAAGTTGAC..... 2 21
.....AAAGTTAGAGAAGTTGACTTAGG..... 6 24
.....AGAAAGTTGACTTAGGACAAAAC..... 1 24

```

```

>osa-miR438_MIMAT0001587_Oryza_sativa_miR438
TCAAAACCAATATATTTTAAATGGCATATATTTCAATTAACGTGTTGGGCAACTGTTCCACCGGTTATAGTAAAACTTTTGGAAATGTTGTTGATGGGATATATATTGATTTGATGATAGTGAAGCATAA
*****TCCACCGGTTATAGTAAAA*****osa-miR438 21
.....ATTGATTTGATGATAGTGAAGCATA..... 1 24

```

```

>osa-miR439a_MIMAT0001589_Oryza_sativa_miR439a
TGTCAAACGACGAGTTGCACATGTACCTGCGAACTGTGGTGTTCGATAGGTATCCCTGCGAACCGCGGTTGTCGACAGGGTGCTAACTGCGATTGCCTAACTGATCTATGTTTCCGATTTCCATTAAA
*****TGTGAACCGCGGTTGTCGA*****osa-miR439a 21
.....AAGTGCAGGTTGCACAT..... 1 19
.....AAGTGCAGGTTGCACATG..... 1 20
.....AAGTGCAGGTTGCACATGT..... 1 21
.....AAGTGCAGGTTGCACATGTACC..... 7 24
.....AAGTGCAGGTTGCACATGTACCT..... 1 25
.....AAGTGCAGGTTGCACATGTAC..... 4 21
.....AAGTGCAGGTTGCACATGTAC..... 1 22
.....AAGTGCAGGTTGCACATGTACCT..... 6 24
.....TGACGAGTTGCACATGTACCT..... 1 24
.....GCAGTTGCACATGTACCTG..... 1 19
.....TCAAAGTTAGAGAAGTTGAC..... 3 24
.....CGAACTGTGGTGTTCGATAGGT..... 2 23
.....CGAACTGTGGTGTTCGATAGGT..... 7 24
.....GAAGTGTGGTGTTCGATAGGT..... 8 23
.....GAAGTGTGGTGTTCGATAGGT..... 27 24
.....AAGTGTGGTGTTCGATAGGT..... 1 21
.....AAGTGTGGTGTTCGATAGGT..... 1 22
.....AAGTGTGGTGTTCGATAGGT..... 1 23
.....AAGTGTGGTGTTCGATAGGTATC..... 9 24
.....ACTGTGGTGTTCGATAGGT..... 2 21
.....TGTGGTGTTCGATAGGT..... 1 20
.....TGTGGTGTTCGATAGGTATCCCTG..... 1 25
.....GTGGTGTTCGATAGGT..... 1 19
.....GATAGGTATCCCTGCGAACCGCG..... 3 24
.....GATAGGTATCCCTGCGAACCGCGG..... 1 25
.....ATAGGTATCCCTGCGAACCGCGG..... 4 24
.....TAGGTATCCCTGCGAACCGCGG..... 1 23
.....TAGGTATCCCTGCGAACCGCGGT..... 3 24
.....AGGTATCCCTGCGAACCGCGGT..... 2 23
.....AGGTATCCCTGCGAACCGCGGTT..... 27 24
.....AGGTATCCCTGCGAACCGCGGTTG..... 1 25
.....GGTATCCCTGCGAACCGCGGTT..... 6 23
.....GGTATCCCTGCGAACCGCGGTTG..... 6 24
.....GTATCCCTGCGAACCGCGGTT..... 2 22
.....GTATCCCTGCGAACCGCGGTTG..... 3 24
.....TATCCCTGCGAACCGCGGTT..... 1 21
.....TATCCCTGCGAACCGCGGTTG..... 1 23
.....ATCCCTGCGAACCGCGGTT..... 1 20
.....ATCCCTGCGAACCGCGGTTG..... 1 21
.....ATCCCTGCGAACCGCGGTTGTC..... 4 24
.....TCCCTGCGAACCGCGGTTG..... 1 20
.....TCCCTGCGAACCGCGGTTGTC..... 1 23
.....GAACCGGTTGTTCCGACAGGTTG..... 1 24
.....AACCAGGTTGTTCCGACAGG..... 1 20
.....AACCAGGTTGTTCCGACAGGTTG..... 1 24
.....CGTTGTTCCGACAGGTTGCTAAAC..... 1 24
.....GGTTGTTCCGACAGGTTGCTAAAC..... 5 24
.....TTGTTCCGACAGGTTGCTAAAC..... 1 21
.....TAAACTTGCAGTTTGCCTAACTG..... 1 24

```

```

>osa-miR439b_MIMAT0001590_Oryza_sativa_miR439b
TGTCAAACGACGAGTTGCACATGTCCCTGCGAACTGTGGTGTTCGATAGGTATCCCTGCGAACCGCGGTTGTCGACAGGGTGCTAACTGCGATTGCCTAACTGACATATAGTTTTCGATTTCCATTAAA
*****TGTGAACCGCGGTTGTCGA*****osa-miR439b 21
.....TGACGAGTTGCACATGTTC..... 1 21
.....GAATTGTGGTGTTCGATAGGTAC..... 1 24
.....ATAGGTATCCCTGCGAACCGCGG..... 1 24
.....AGGTATCCCTGCGAACCGCGG..... 3 24
.....GGTATCCCTGCGAACCGCGGTT..... 1 23
.....ACCCCTGCGAACCGCGGTTGTC..... 1 24
.....GAACCGGTTGTTCCGACAGGTTG..... 1 24
.....AACCAGGTTGTTCCGACAGG..... 1 20
.....AACCAGGTTGTTCCGACAGGTTG..... 1 24
.....CGTTGTTCCGACAGGTTGCTAAAC..... 1 24
.....GGTTGTTCCGACAGGTTGCTAAAC..... 5 24
.....TTGTTCCGACAGGTTGCTAAAC..... 1 21

```

```

>osa-miR439c_MIMAT0001591_Oryza_sativa_miR439c
TGTCAAACGACGAGTTGCACATGTACCTGCGAACTGTGGTGTTCGATAGGTATCCCTGCGAACCGCGGTTGTCGACAGGGTGCTAACTGCGATTGCCTAACTGATTTTACGATTTCCATTAAAATCATATG
*****TGTGAACCGCGGTTGTCGA*****osa-miR439c 21
.....AAGTGCAGGTTGCACAT..... 1 19
.....AAGTGCAGGTTGCACATG..... 1 20
.....AAGTGCAGGTTGCACATGT..... 1 21
.....AAGTGCAGGTTGCACATGTACC..... 7 24
.....AAGTGCAGGTTGCACATGTACCT..... 1 25
.....AAGTGCAGGTTGCACATGTAC..... 4 21
.....AAGTGCAGGTTGCACATGTAC..... 1 22
.....AAGTGCAGGTTGCACATGTACCT..... 6 24
.....TGACGAGTTGCACATGTACCTG..... 1 24
.....GCAGTTGCACATGTACCTG..... 1 19
.....TCAAAGTTAGAGAAGTTGAC..... 3 24

```

```

.....CGAACTGGTTGTTGATAGGT..... 2 23
.....CGAACTGGTTGTTGATAGGTA..... 7 24
.....GAACTGGTTGTTGATAGGTA..... 8 23
.....GAACTGGTTGTTGATAGGTAT..... 27 24
.....AACTGGTTGTTGATAGGT..... 1 21
.....AACTGGTTGTTGATAGGTA..... 1 22
.....AACTGGTTGTTGATAGGTAT..... 1 23
.....AACTGGTTGTTGATAGGTATC..... 9 24
.....ACTGGTTGTTGATAGGTA..... 2 21
.....TGTGGTTGTTGATAGGTAT..... 1 20
.....TGTGGTTGTTGATAGGTATCCCTG..... 1 25
.....GTGGTTGTTGATAGGTAT..... 1 19
.....GATAGGTATCCCTGCGAACCCGG..... 3 24
.....GATAGGTATCCCTGCGAACCCGG..... 1 25
.....ATAGGTATCCCTGCGAACCCGG..... 4 24
.....TAGGTATCCCTGCGAACCCGG..... 1 23
.....TAGGTATCCCTGCGAACCCGGT..... 3 24
.....AGGTATCCCTGCGAACCCGGT..... 2 23
.....AGGTATCCCTGCGAACCCGGTT..... 27 24
.....AGGTATCCCTGCGAACCCGGTTG..... 1 25
.....GGTATCCCTGCGAACCCGGTT..... 6 23
.....GGTATCCCTGCGAACCCGGTTG..... 6 24
.....GTATCCCTGCGAACCCGGTT..... 2 22
.....GTATCCCTGCGAACCCGGTTG..... 3 24
.....TATCCCTGCGAACCCGGTT..... 1 21
.....TATCCCTGCGAACCCGGTTG..... 1 23
.....ATCCCTGCGAACCCGGTT..... 1 20
.....ATCCCTGCGAACCCGGTTG..... 1 21
.....ATCCCTGCGAACCCGGTTGTC..... 4 24
.....TCCCTGCGAACCCGGTTG..... 1 20
.....TCCCTGCGAACCCGGTTGTC..... 1 23
.....GAACCCGGTTGTTGACAGGGT..... 1 24
.....AACCCGGTTGTTGACAGG..... 1 20
.....AACCCGGTTGTTGACAGGGT..... 1 24
.....CGTTGTTGACAGGGTCTAAAC..... 1 24
.....GTTGTTGACAGGGTCTAAACT..... 5 24
.....TTGTTGACAGGGTCTAAAC..... 1 21

```

```

>osa-miR439d_MIMAT0001592_Oryza_sativa_miR439d
TGTGAACTCAGCAGTTGCACATGTACCTGCGAACTGGTTGTTGATAGGTATCCCTGCGAACCCGGTTGTTGATAGGGTCTAAACTGCGATTTGCTAACTGACCTATAGTTTGCAGTTTCCATTAA
*****TGTGAAACCCGGTTGTTGCA*****
.....TCGAACTGGTTGTTGATAGGT..... 3 24
.....CGAACTGGTTGTTGATAGGT..... 2 23
.....CGAACTGGTTGTTGATAGGTA..... 7 24
.....GAACTGGTTGTTGATAGGTA..... 8 23
.....GAACTGGTTGTTGATAGGTAT..... 27 24
.....AACTGGTTGTTGATAGGT..... 1 21
.....AACTGGTTGTTGATAGGTA..... 1 22
.....AACTGGTTGTTGATAGGTAT..... 1 23
.....AACTGGTTGTTGATAGGTATC..... 9 24
.....ACTGGTTGTTGATAGGTA..... 2 21
.....TGTGGTTGTTGATAGGTAT..... 1 20
.....TGTGGTTGTTGATAGGTATCCCTG..... 1 25
.....GTGGTTGTTGATAGGTAT..... 1 19
.....GATAGGTATCCCTGCGAACCCGG..... 3 24
.....GATAGGTATCCCTGCGAACCCGG..... 1 25
.....ATAGGTATCCCTGCGAACCCGG..... 4 24
.....TAGGTATCCCTGCGAACCCGG..... 1 23
.....TAGGTATCCCTGCGAACCCGGT..... 3 24
.....AGGTATCCCTGCGAACCCGGT..... 2 23
.....AGGTATCCCTGCGAACCCGGT..... 27 24
.....AGGTATCCCTGCGAACCCGGTT..... 1 25
.....GGTATCCCTGCGAACCCGGTT..... 6 23
.....GGTATCCCTGCGAACCCGGTTG..... 6 24
.....GTATCCCTGCGAACCCGGTT..... 2 22
.....GTATCCCTGCGAACCCGGTTG..... 3 24
.....TATCCCTGCGAACCCGGTT..... 1 21
.....TATCCCTGCGAACCCGGTTG..... 1 23
.....ATCCCTGCGAACCCGGTT..... 1 20
.....ATCCCTGCGAACCCGGTTG..... 1 21
.....ATCCCTGCGAACCCGGTTGTC..... 4 24
.....TCCCTGCGAACCCGGTTG..... 1 20
.....TCCCTGCGAACCCGGTTGTC..... 1 23
.....GTTGTTGATAGGGTCTAAACT..... 1 24

```

```

>osa-miR439e_MIMAT0001593_Oryza_sativa_miR439e
TGTGAACTCAGCAGTTGCACATGTACCTGCGAACTGGTTGTTGATAGGTATCCCTGCGAACCCGGTTGTTGACAGGGTCTAAACTGCGATTTGCTAACTGACCTATAGTTTGCAGTTTCCATTAA
*****TGTGAAACCCGGTTGTTGCA*****
.....AACTGACGAGTTGCACAT..... 1 19
.....AACTGACGAGTTGCACATG..... 1 20
.....AACTGACGAGTTGCACATGT..... 1 21
.....AACTGACGAGTTGCACATGTACC..... 7 24
.....AACTGACGAGTTGCACATGTACCT..... 1 25
.....ACTGACGAGTTGCACATGTA..... 4 21
.....ACTGACGAGTTGCACATGTAC..... 1 22
.....ACTGACGAGTTGCACATGTACCT..... 6 24
.....TGACGAGTTGCACATGTACCTG..... 1 24
.....GCAGTTGCACATGTACCTG..... 1 19
.....TCGAACTGGTTGTTGATAGGT..... 3 24
.....CGAACTGGTTGTTGATAGGT..... 2 23
.....CGAACTGGTTGTTGATAGGTA..... 7 24
.....GAACTGGTTGTTGATAGGTA..... 8 23
.....GAACTGGTTGTTGATAGGTAT..... 27 24
.....AACTGGTTGTTGATAGGT..... 1 21
.....AACTGGTTGTTGATAGGTA..... 1 22
.....AACTGGTTGTTGATAGGTAT..... 1 23
.....AACTGGTTGTTGATAGGTATC..... 9 24
.....ACTGGTTGTTGATAGGTA..... 2 21
.....TGTGGTTGTTGATAGGTAT..... 1 20
.....TGTGGTTGTTGATAGGTATCCCTG..... 1 25
.....GTGGTTGTTGATAGGTAT..... 1 19
.....GATAGGTATCCCTGCGAACCCGG..... 3 24
.....GATAGGTATCCCTGCGAACCCGG..... 1 25
.....ATAGGTATCCCTGCGAACCCGG..... 4 24
.....TAGGTATCCCTGCGAACCCGG..... 1 23
.....TAGGTATCCCTGCGAACCCGGT..... 3 24
.....AGGTATCCCTGCGAACCCGGT..... 2 23
.....AGGTATCCCTGCGAACCCGGTT..... 27 24
.....AGGTATCCCTGCGAACCCGGTTG..... 1 25
.....GGTATCCCTGCGAACCCGGTT..... 6 23

```

```

.....GGTATCCCTGTGAACCGCGGTT..... 6 24
.....GTATCCCTGTGAACCGCGGTT..... 2 22
.....GTATCCCTGTGAACCGCGGTTGT..... 3 24
.....TATCCCTGTGAACCGCGGTT..... 1 21
.....TATCCCTGTGAACCGCGGTTGT..... 1 23
.....ATCCCTGTGAACCGCGGTT..... 1 20
.....ATCCCTGTGAACCGCGGTTGT..... 1 21
.....ATCCCTGTGAACCGCGGTTGTTC..... 4 24
.....TCCCTGTGAACCGCGGTTGT..... 1 20
.....TCCCTGTGAACCGCGGTTGTTC..... 1 23
.....GAACCGCGGTTGTTCGACAGGTT..... 1 24
.....AACCCGCGGTTGTTCGACAGG..... 1 20
.....AACCCGCGGTTGTTCGACAGGTTGC..... 1 24
.....CGTTGTTCGACAGGTTGCTAAAC..... 1 24
.....GGTTGTTCGACAGGTTGCTAAACT..... 5 24
.....TTGTTCGACAGGTTGCTAAAC..... 1 21
.....TGCTAACTTGCAGTTTGTCT..... 1 21

```

>osa-miR439f_MIMAT0001594_Oryza_sativa_miR439f
TGTGAACTGACGCGAGTTGCACATGTACCTGTGCGAACTGTGGTTGTTGATAGGTATCCCTGTGAACCGCGGTTGTTCGACAGGTTGCTAAACTTGCAGTTTGCCTAACTGACATAGTTTGCAGTTTTCATTAA
*****TGTGAACCGCGGTTGTTCGA*****

```

.....AACTGACGCGAGTTGCACAT..... 1 19
.....AACTGACGCGAGTTGCACATG..... 1 20
.....AACTGACGCGAGTTGCACATGT..... 1 21
.....AACTGACGCGAGTTGCACATGTACC..... 7 24
.....AACTGACGCGAGTTGCACATGTACCT..... 1 25
.....AACTGACGCGAGTTGCACATGTAC..... 4 21
.....AACTGACGCGAGTTGCACATGTAC..... 1 22
.....AACTGACGCGAGTTGCACATGTACCT..... 6 24
.....TGAACCGCGGTTGCACATGTACCTGT..... 1 24
.....GCGAGTTGCACATGTACCTG..... 1 19
.....TCGAACCTGTGGTTGTTGATAGGT..... 3 24
.....CGAACTGTGGTTGTTGATAGGT..... 2 23
.....CGAACTGTGGTTGTTGATAGGTA..... 7 24
.....GAACCTGTGGTTGTTGATAGGTA..... 8 23
.....GAACCTGTGGTTGTTGATAGGTTAT..... 27 24
.....AACTGTGGTTGTTGATAGGT..... 1 21
.....AACTGTGGTTGTTGATAGGTA..... 1 22
.....AACTGTGGTTGTTGATAGGTA..... 1 23
.....AACTGTGGTTGTTGATAGGTATC..... 9 24
.....AACTGTGGTTGTTGATAGGTA..... 2 21
.....TGTGGTTGTTGATAGGTAT..... 1 20
.....TGTGGTTGTTGATAGGTATCCCTG..... 1 25
.....GTGGTTGTTGATAGGTAT..... 1 19
.....GATAGGTATCCCTGTGAACCGCG..... 3 24
.....GATAGGTATCCCTGTGAACCGCGG..... 1 25
.....ATAGGTATCCCTGTGAACCGCG..... 4 24
.....TAGGTATCCCTGTGAACCGCG..... 1 23
.....TAGGTATCCCTGTGAACCGCGGT..... 3 24
.....AGGTATCCCTGTGAACCGCGGT..... 2 23
.....AGGTATCCCTGTGAACCGCGGTT..... 27 24
.....AGGTATCCCTGTGAACCGCGGTTG..... 1 25
.....GGTATCCCTGTGAACCGCGGTT..... 6 23
.....GGTATCCCTGTGAACCGCGGTTG..... 6 24
.....GTATCCCTGTGAACCGCGGTT..... 2 22
.....GTATCCCTGTGAACCGCGGTTGT..... 3 24
.....TATCCCTGTGAACCGCGGTT..... 1 21
.....TATCCCTGTGAACCGCGGTTGT..... 1 23
.....ATCCCTGTGAACCGCGGTT..... 1 20
.....ATCCCTGTGAACCGCGGTTGT..... 1 21
.....ATCCCTGTGAACCGCGGTTGTTC..... 4 24
.....TCCCTGTGAACCGCGGTTG..... 1 20
.....TCCCTGTGAACCGCGGTTGTTC..... 1 23
.....GAACCGCGGTTGTTCGACAGGTTG..... 1 24
.....AACCCGCGGTTGTTCGACAGG..... 1 20
.....AACCCGCGGTTGTTCGACAGGTTGC..... 1 24
.....CGTTGTTCGACAGGTTGCTAAAC..... 1 24
.....GGTTGTTCGACAGGTTGCTAAACT..... 5 24
.....TTGTTCGACAGGTTGCTAAAC..... 1 21
.....TAACTTGCAGTTTGCCTAACTG..... 1 24
.....AACTTGCAGTTTGCCTAACTGACA..... 2 24

```

osa-miR439f 21

>osa-miR439g_MIMAT0001595_Oryza_sativa_miR439g
TGTGAACTGACGCGAGTTGCACATGTACCTGTGCGAACTGTGGTTGTTGATAGGTATCCCTGTGAACCGCGGTTGTTCGACAGGTTGCTAAACTTGCAGTTTGCCTAACTGCTCTATAGTTTTCAGTTTTCATTAA
*****TGTGAACCGCGGTTGTTCGA*****

```

.....AACTGACGCGAGTTGCACAT..... 1 19
.....AACTGACGCGAGTTGCACATG..... 1 20
.....AACTGACGCGAGTTGCACATGT..... 1 21
.....AACTGACGCGAGTTGCACATGTACC..... 7 24
.....AACTGACGCGAGTTGCACATGTACCT..... 1 25
.....AACTGACGCGAGTTGCACATGTAC..... 4 21
.....AACTGACGCGAGTTGCACATGTAC..... 1 22
.....AACTGACGCGAGTTGCACATGTACCT..... 6 24
.....TGAACCGCGGTTGCACATGTACCTGT..... 1 24
.....GCGAGTTGCACATGTACCTG..... 1 19
.....TCGAACCTGTGGTTGTTGATAGGT..... 3 24
.....CGAACTGTGGTTGTTGATAGGTA..... 2 23
.....CGAACTGTGGTTGTTGATAGGTA..... 7 24
.....GAACCTGTGGTTGTTGATAGGTA..... 8 23
.....GAACCTGTGGTTGTTGATAGGTTAT..... 27 24
.....AACTGTGGTTGTTGATAGGT..... 1 21
.....AACTGTGGTTGTTGATAGGTA..... 1 22
.....AACTGTGGTTGTTGATAGGTATC..... 1 23
.....AACTGTGGTTGTTGATAGGTA..... 9 24
.....AACTGTGGTTGTTGATAGGTA..... 2 21
.....TGTGGTTGTTGATAGGTAT..... 1 20
.....TGTGGTTGTTGATAGGTATCCCTG..... 1 25
.....GTGGTTGTTGATAGGTAT..... 1 19
.....GATAGGTATCCCTGTGAACCGCG..... 3 24
.....GATAGGTATCCCTGTGAACCGCGG..... 1 25
.....ATAGGTATCCCTGTGAACCGCG..... 4 24
.....TAGGTATCCCTGTGAACCGCG..... 1 23
.....TAGGTATCCCTGTGAACCGCGGT..... 3 24
.....AGGTATCCCTGTGAACCGCGGT..... 2 23
.....AGGTATCCCTGTGAACCGCGGTT..... 27 24
.....AGGTATCCCTGTGAACCGCGGTTG..... 1 25
.....GGTATCCCTGTGAACCGCGGTT..... 6 23
.....GGTATCCCTGTGAACCGCGGTTG..... 6 24
.....GTATCCCTGTGAACCGCGGTT..... 2 22
.....GTATCCCTGTGAACCGCGGTTGT..... 3 24

```

osa-miR439g 21

```

.....TATCCCTGTGAACCGCGTT..... 1 21
.....TATCCCTGTGAACCGCGTTGT..... 1 23
.....ATCCCTGTGAACCGCGTT..... 1 20
.....ATCCCTGTGAACCGCGTTG..... 1 21
.....ATCCCTGTGAACCGCGTTGTC..... 4 24
.....TCCCTGTGAACCGCGTTG..... 1 20
.....TCCCTGTGAACCGCGTTGTC..... 1 23
.....GAACCGCGTTGTTCGACAGGTC..... 1 24
.....AACC CGCGTTGTTCGACAGG..... 1 20
.....AACC CGCGTTGTTCGACAGGTC..... 1 24
.....CGTTGTTCGACAGGTCCTAAAC..... 1 24
.....GGTTGTTCGACAGGTCCTAAAC..... 5 24
.....TTGTTCGACAGGTCCTAAAC..... 1 21
.....TAAACTGCGATTCCGCTAACTG..... 1 24

```

```

>osa-miR439h_MIMAT0001596_Oryza_sativa_miR439h
TGTCGAACCTCAGCAGTTGCATGTACCTGTGAACCTGTGGTGTTCGATAGTATCCCTGTGAACCGCGTTGTTCGACAGGTCCTAAACTGCGATTCCGCTAACTGACCTATAGTTTGCAGTTCCATTAAA
*****TGTGAACCGCGTTGTTCGA*****
.....GCAGTTCACATGTACCTG..... 1 19
.....TCGAACCTGTGGTGTTCGATAGT..... 3 24
.....CGAACCTGTGGTGTTCGATAGT..... 2 23
.....CGAACCTGTGGTGTTCGATAGTA..... 7 24
.....GAACCTGTGGTGTTCGATAGTA..... 8 23
.....GAACCTGTGGTGTTCGATAGTAT..... 27 24
.....AACTGTGGTGTTCGATAGT..... 1 21
.....AACTGTGGTGTTCGATAGTA..... 1 22
.....AACTGTGGTGTTCGATAGTAT..... 1 23
.....AACTGTGGTGTTCGATAGTATC..... 9 24
.....ACTGTGGTGTTCGATAGTA..... 2 21
.....TGTGGTGTTCGATAGTAT..... 1 20
.....TGTGGTGTTCGATAGTATCCCTG..... 1 25
.....GTGGTGTTCGATAGTAT..... 1 19
.....GATAGTATCCCTGTGAACCGCG..... 3 24
.....GATAGTATCCCTGTGAACCGCGG..... 1 25
.....ATAGGTATCCCTGTGAACCGCGG..... 4 24
.....TAGGTATCCCTGTGAACCGCGG..... 1 23
.....TAGGTATCCCTGTGAACCGCGT..... 3 24
.....AGTATCCCTGTGAACCGCGG..... 2 23
.....AGTATCCCTGTGAACCGCGTT..... 27 24
.....AGTATCCCTGTGAACCGCGTTG..... 1 25
.....GGTATCCCTGTGAACCGCGTT..... 6 23
.....GGTATCCCTGTGAACCGCGTTG..... 6 24
.....GTATCCCTGTGAACCGCGTT..... 2 22
.....GTATCCCTGTGAACCGCGTTGT..... 3 24
.....TATCCCTGTGAACCGCGTT..... 1 21
.....TATCCCTGTGAACCGCGTTGT..... 1 23
.....ATCCCTGTGAACCGCGTT..... 1 20
.....ATCCCTGTGAACCGCGTTG..... 1 21
.....ATCCCTGTGAACCGCGTTGTC..... 4 24
.....TCCCTGTGAACCGCGTTG..... 1 20
.....TCCCTGTGAACCGCGTTGTC..... 1 23
.....GAACCGCGTTGTTCGACAGGTC..... 1 24
.....AACC CGCGTTGTTCGACAGG..... 1 20
.....AACC CGCGTTGTTCGACAGGTC..... 1 24
.....CGTTGTTCGACAGGTCCTAAAC..... 1 24
.....GGTTGTTCGACAGGTCCTAAAC..... 5 24
.....TTGTTCGACAGGTCCTAAAC..... 1 21
.....TAAACTGCGATTCCGCTAACTG..... 1 24

```

```

osa-miR439h 21
1 19
3 24
2 23
7 24
8 23
27 24
1 21
1 22
1 23
9 24
2 21
1 20
1 25
1 19
3 24
1 25
4 24
1 23
3 24
2 23
27 24
1 25
6 23
6 24
2 22
3 24
1 21
1 23
1 20
1 21
4 24
1 20
1 23
1 24
1 24
5 24
1 21
1 24

```

```

>osa-miR440_MIMAT0001599_Oryza_sativa_miR440
TGCTGGCTCTGCTGATCAGTAGAGACTCTGACCTAGCCCTAACTATGATATTGATCTCTGATGATCGGGCAAGGCTAACACGATGAGAGGATCTACCTTTATCCCTGTTTCAGACCTTCTCTATCCA
*****AGTGTCTCTGATGATCGGGCAAA*****
.....AGTGTCTCTGATGATCGGGCAAA..... 10 24
.....TCCTGATGATCGGGCAAGGCT..... 8 21
.....TCCTGATGATCGGGCAAGGCT..... 3 22
.....CTGATGATCGGGCAAGGCTA..... 4 21
.....TGATGATCGGGCAAGGCTA..... 2 20
.....TGATGATCGGGCAAGGCTAAC..... 8 22
.....TGATCGGGCAAGGCTAACCGA..... 1 24

```

```

osa-miR440 24
10 24
8 21
3 22
4 21
2 20
8 22
1 24

```

```

>osa-miR441a_MIMAT0001602_Oryza_sativa_miR441a
CTCTATTAAACAATGAAGTCATTTAGCATTTCACACATTATATGATCTAGATTATTACCATCAATATAAATGTTGGAAATGCTAAATGACTTACATTGTAAGGAGGGAGTAGTAATCAAATACTAAGCAGCTC
*****TACCATCAATATAAATGTTGGAA*****
.....AATGAAGTCATTTAGCA..... 1 19
.....AATGAAGTCATTTAGCATT..... 1 21
.....TAAGTCATTTAGCATTTC..... 1 19
.....ATCAATATAAATGTTGGAAA..... 1 20
.....ATCAATATAAATGTTGGAAATGCT..... 1 24
.....TCAATATAAATGTTGGAAATGCTA..... 1 24
.....AATATAAATGTTGGAAATGCT..... 1 21
.....ATATAAATGTTGGAAATGCTA..... 1 21
.....ATATAAATGTTGGAAATGCTAAAA..... 1 24
.....AATGTTGGAAATGCTAAAA..... 1 19
.....AATGCTAAATGACTTACAT..... 3 21
.....AATGCTAAATGACTTACATTG..... 1 22
.....ATGCTAAATGACTTACAT..... 1 19
.....ATGCTAAATGACTTACATTG..... 2 21
.....TAAAGTACTTACATTGTA..... 2 20
.....TAAAGTACTTACATTGTAAG..... 1 21
.....TAAAGTACTTACATTGTAAG..... 1 22
.....TAAAGTACTTACATTGTAAGCGG..... 11 24
.....TAAAGTACTTACATTGTAAGCGG..... 1 23
.....TAAAGTACTTACATTGTAAGCGGA..... 17 24
.....TAAAGTACTTACATTGTAAGCGG..... 1 19
.....TAAAGTACTTACATTGTAAGCGG..... 2 21
.....TAAAGTACTTACATTGTAAGCGG..... 8 22
.....TAAAGTACTTACATTGTAAGCGGA..... 30 23
.....TAAAGTACTTACATTGTAAGCGGAG..... 35 24
.....TAAAGTACTTACATTGTAAGCGG..... 35 21
.....TAAAGTACTTACATTGTAAGCGGAG..... 42 22
.....TAAAGTACTTACATTGTAAGCGGAG..... 34 23
.....TAAAGTACTTACATTGTAAGCGGAGG..... 16 24
.....TAAAGTACTTACATTGTAAGCGG..... 7 20
.....TAAAGTACTTACATTGTAAGCGGA..... 119 21
.....TAAAGTACTTACATTGTAAGCGGAG..... 9 22
.....TAAAGTACTTACATTGTAAGCGGAGG..... 18 23
.....TAAAGTACTTACATTGTAAGCGGAGG..... 4 24
.....TAAAGTACTTACATTGTAAGCGG..... 1 19
.....TAAAGTACTTACATTGTAAGCGGA..... 6 20

```

```

osa-miR441a 24
1 19
1 21
1 19
1 20
1 24
1 24
1 21
1 21
1 24
1 19
3 21
1 22
1 19
2 21
2 20
1 21
1 22
11 24
1 23
17 24
1 19
2 21
8 22
30 23
35 24
35 21
42 22
34 23
16 24
7 20
119 21
9 22
18 23
4 24
1 19
6 20

```

```

.....GACTTACATTGTGAACGGAG..... 2 21
.....GACTTACATTGTGAACGGAGGG..... 11 23
.....GACTTACATTGTGAACGGAGGGA..... 35 24
.....ACTTACATTGTGAACGGAG..... 4 20
.....ACTTACATTGTGAACGGAGG..... 18 21
.....ACTTACATTGTGAACGGAGGG..... 11 22
.....ACTTACATTGTGAACGGAGGGG..... 4 24
.....CTTACATTGTGAACGGAGGGAG..... 1 23
.....CTTACATTGTGAACGGAGGGAGT..... 1 24
.....TTACATTGTGAACGGAGG..... 1 19
.....TTACATTGTGAACGGAGGG..... 3 20
.....TTACATTGTGAACGGAGGGA..... 1 21
.....TTACATTGTGAACGGAGGGAG..... 1 22
.....TTACATTGTGAACGGAGGGAGT..... 1 23
.....TACATTGTGAACGGAGGGAG..... 2 21
.....TACATTGTGAACGGAGGGAGTA..... 2 23
.....ACATTGTGAACGGAGGG..... 1 18
.....ACATTGTGAACGGAGGGAGT..... 3 21
.....TTGTGAACGGAGGGAGT..... 1 18
.....TTGTGAACGGAGGGAGTAGTA..... 1 22
.....TGTGAACGGAGGGAGTA..... 1 18
.....TGTGAACGGAGGGAGTAG..... 1 19

```

```

>osa-miR441b_MIMAT0001603_Oryza_sativa_miR441b
AATGTAAGTCATTTAGTAATTTTCATATTGATGTTAATGAATCTAGACTCATGACCATCAATAAATGTTGAAATGTTAGTAAGTACTTACATTATGAACATAGGAGCAGTAGTTTCCAGTGAAGTTAATC
*****TACCATCAATAAATGTTGGAATA*****
.....ATATTGATGTTAATGAAT.....
.....ATATTGATGTTAATGAATCTA.....
.....ATATTGATGTTAATGAATCTAGA.....
.....ATATTGATGTTAATGAATCTAGAC.....
.....TTGATGTTAATGAATCTAGAC.....
.....ATCAATATAAATGTTGGAATA.....
.....ATCAATATAAATGTTGGAATGTT.....
.....AAATGTTGGAATGTTAGTAAGTAC.....
.....TGAATGACTTACATTATGAA.....
.....AGAATGACTTACATTATGAACA.....

```

```

osa-miR441b 24
5 24
4 21
7 23
7 24
1 21
1 20
1 21
1 24
1 24
10 21
1 23

```

```

>osa-miR441c_MIMAT0001604_Oryza_sativa_miR441c
CATTTTCATATTTATATTGATGTAATGAATCTAGATAGATATATGCTAGATTCTTACCATCAATAAATGTTGAAATGTTAGTAAGTACTTACATTATGAACATAGGAGCAGTAGTTTCCAGTGAAGTTAATC
*****TACCATCAATAAATGTTGGAATA*****
.....ATATTGATGTTAATGAAT.....
.....ATTGATGTTAATGAATCTAGATA.....
.....ATATATATGCTAGATTCTATT.....
.....ATCAATATAAATGTTGGAATA.....
.....ATCAATATAAATGTTGGAATGCT.....
.....TCAATATAAATGTTGGAATGCTA.....
.....AATATAAATGTTGGAATGCT.....
.....ATATAAATGTTGGAATGCTA.....
.....ATAAATGTTGGAATGCTAGAA.....
.....ATAAATGTTGGAATGCTAGATA.....
.....AATGTTGGAATGCTAGATA.....
.....AAATGCTAGATAAATCTACATTGT.....
.....AATGCTAGATAAATCTACATTGTG.....
.....ATGCTAGATAAATCTACATTGTGA.....
.....TGCTAGATAAATCTACATTGTGAA.....
.....TAGATAAATCTACATTGTGAA.....
.....AGAATAAATCTACATTGTGAACGG.....
.....GAATAAATCTACATTGTGAACGG.....
.....GAATAAATCTACATTGTGAACGGGA.....
.....AATAAATCTACATTGTGAACGGGA.....
.....AATAAATCTACATTGTGAACGGAG.....
.....TAACCTACATTGTGAACGGAG.....
.....TAACCTACATTGTGAACGGAGG.....
.....AACTTACATTGTGAACGGAG.....
.....AACTTACATTGTGAACGGAGGAA.....
.....ACTTACATTGTGAACGGAG.....
.....ACTTACATTGTGAACGGAGG.....
.....ACTTACATTGTGAACGGAGGA.....
.....ACTTACATTGTGAACGGAGGAA.....
.....CTTACATTGTGAACGGAGGAA.....
.....CTTACATTGTGAACGGAGGAA.....
.....TTACATTGTGAACGGAGG.....
.....TTACATTGTGAACGGAGGA.....
.....TTACATTGTGAACGGAGGAA.....
.....TTACATTGTGAACGGAGGAAG.....
.....TTACATTGTGAACGGAGGAAGT.....
.....TTACATTGTGAACGGAGGAAGTA.....
.....TACATTGTGAACGGAGGA.....
.....TACATTGTGAACGGAGGAA.....
.....TACATTGTGAACGGAGGAAAG.....
.....TACATTGTGAACGGAGGAAGT.....
.....TACATTGTGAACGGAGGAAGTA.....
.....ACATTGTGAACGGAGGA.....
.....ACATTGTGAACGGAGGAA.....
.....ACATTGTGAACGGAGGAAG.....
.....ACATTGTGAACGGAGGAAGT.....
.....ACATTGTGAACGGAGGAAGTA.....
.....ACATTGTGAACGGAGGAAGTACT.....
.....CATTGTGAACGGAGGAAGT.....
.....CATTGTGAACGGAGGAAGTA.....
.....ATTGTGAACGGAGGAAGTACT.....
.....TTGTGAACGGAGGAAGTACT.....
.....GAAGTACTATATTACGAGATCTCA.....

```

```

osa-miR441c 24
1 18
1 23
2 21
1 20
1 24
1 24
1 21
1 21
1 22
1 24
1 18
3 24
1 24
5 24
1 24
1 21
23 24
2 23
19 24
3 23
2 24
1 24
1 22
1 24
2 24
4 20
18 21
8 22
2 23
7 24
1 21
2 22
1 19
4 20
12 21
2 22
3 23
1 24
2 19
4 20
11 21
1 22
2 23
1 18
1 19
1 20
7 21
3 22
2 24
1 20
1 21
1 21
2 21
1 23

```

```

>osa-miR442_MIMAT0001605_Oryza_sativa_miR442
ATGTTTGAACACATATATGGAGTAAATATAAATGAAAAAATAAATATAACAGATGACGTGTAATTCGAGACGAATCTTTTAAAGCTAATGCTCCATGATCTGCAATGTGGTCTACAGTAAACATTTGCTAAT
*****TGACGTGTAATTCGAGACGAAT*****
.....TGTAATTCGAGACGAAT.....
.....GTAATTCGAGACGAATC.....
.....TAAATTCGAGACGAATCTTT.....
.....TAAATTCGAGACGAATCTTTT.....
.....TAAATTCGAGACGAATCTTTT.....
.....AAATTCGAGACGAATCTTT.....
.....AAATTCGAGACGAATCTTTT.....
.....AAATTCGAGACGAATCTTTT.....
.....AAATTCGAGACGAATCTTTTAA.....
.....AAATTCGAGACGAATCTTTTAA.....

```

```

osa-miR442 24
1 18
1 19
1 21
1 22
3 23
1 19
1 21
1 22
7 23
23 24

```

```

.....AATTGCAGAGCAATCTTT..... 2 19
.....AATTGCAGAGCAATCTTTTAA..... 5 22
.....AATTGCAGAGCAATCTTTTAAAG..... 1 23
.....AATTGCAGAGCAATCTTTTAAAGC..... 9 24
.....ATTGCAGAGCAATCTTTTAA..... 2 21
.....ATTGCAGAGCAATCTTTTAAAGC..... 4 23
.....ATTGCAGAGCAATCTTTTAAAGCC..... 9 24
.....TTGCAGAGCAATCTTTT..... 2 18
.....TTGCAGAGCAATCTTTTAA..... 2 19
.....TTGCAGAGCAATCTTTTAAAG..... 1 21
.....TTGCAGAGCAATCTTTTAAAGCC..... 6 23
.....TTGCAGAGCAATCTTTTAAAGCCT..... 3 24
.....TTGCAGAGCAATCTTTTAAAGC..... 1 21
.....CGAGAGCAATCTTTTAAAGCCTAA..... 8 24
.....CGAGAGCAATCTTTTAAAGCCTAAT..... 1 24
.....TAATTGCTCCATGATCTGACAATG..... 2 24
.....AATTGCTCCATGATCTGACAATGT..... 3 24
.....ATTGCTCCATGATCTGACAATGTG..... 1 24
.....GATCTGACAATGGTGTCTACAG..... 1 23
.....TCTGACAATGGTGTCTACAGTA..... 1 23
.....TCTGACAATGGTGTCTACAGTAA..... 1 24
.....CTGACAATGGTGTCTACAGTAA..... 1 24
.....TGACAATGGTGTCTACAGTAA..... 1 22
.....ACAATGGTGTCTACAGTAAACA..... 1 23
.....ACAATGGTGTCTACAGTAAACAT..... 1 24
.....ATGTGGTCTACAGTAAAC..... 1 19

```

```

>osa-miR445a_MIMAT0001607_Oryza_sativa_miR445a
TCTCGCAATAGTCCAAGGTTATAGAATAGGTTTATAAATAGTGTATGTTTAACTCTAAATAGTGTATAAACATCCGATGTGACAGGCACTAAATAGTCCCTGTTCCAAACAGGCCAGCTGCTGCTATGTGCA
*****TAAATAGTGTATAAACATCCGAT*****

```

osa-miR445a 24

```

.....TAGTCCAAGGTTATAGAATAGGTT..... 8 24
.....AGTCCAAGGTTATAGAATAGGTT..... 10 24
.....TCCAAGGTTATAGAATAGGTT..... 1 21
.....ATAGAATAGGTTTATAAATAGTG..... 1 24
.....TTAGTGTATGTTTAACTCT..... 1 21
.....ATGTTTAACTCTAAATAGT..... 1 22
.....ATGTTTAACTCTAAATAGTGT..... 1 24
.....TGTTTAACTCTAAATAGTGT..... 1 23
.....AGTGATAAACATCCGATGTGCA..... 3 24
.....GTGATAAACATCCGATGTGCA..... 1 23
.....ATAAACATCCGATGTGACAGGAC..... 2 24
.....AAACATCCGATGTGACAGG..... 1 19
.....AACATCCGATGTGACAGGAC..... 4 21
.....AACATCCGATGTGACAGGACTT..... 1 23
.....AACATCCGATGTGACAGGACTTA..... 1 24
.....ACATCCGATGTGACAGGAC..... 1 20
.....ACATCCGATGTGACAGGACTTA..... 3 23
.....ACATCCGATGTGACAGGACTTAA..... 2 24

```

```

>osa-miR528_MIMAT0002884_Oryza_sativa_miR528
TTTGGTTGGGATAGGTAGTGTATGTTAGGTCTGTTTTTGGCTGTAGCAGCAGCGTGAAGGGGCATGCAGAGGAG*****TGAAGGGGCATGCAGAGGAG*****

```

osa-miR528 21

```

.....AGCAGCAGCGTGAAGGGGC..... 1 21
.....CAGTGAAGGGGCATGCAGAGGA..... 2 23
.....GTGAAGGGGCATGCAGAGGA..... 4 21
.....TGAAGGGGCATGCAGAG..... 31 18
.....TGAAGGGGCATGCAGAGG..... 77 19
.....TGAAGGGGCATGCAGAGGA..... 221 20
.....TGAAGGGGCATGCAGAGGAG..... 117863 21
.....TGAAGGGGCATGCAGAGGAG..... 530 22
.....TGAAGGGGCATGCAGAGGAGCA..... 13 23
.....TGAAGGGGCATGCAGAGGAGCAG..... 7 24
.....GGAAGGGGCATGCAGAGG..... 5 18
.....GGAAGGGGCATGCAGAGGA..... 13 19
.....GGAAGGGGCATGCAGAGGAG..... 4236 20
.....GGAAGGGGCATGCAGAGGAGG..... 46 21
.....GGAAGGGGCATGCAGAGGAGCA..... 2 22
.....GGAAGGGGCATGCAGAGGAGCAG..... 12 23
.....GGAAGGGGCATGCAGAGGAGCAGG..... 1 24
.....GAAGGGGCATGCAGAGGA..... 2 18
.....GAAGGGGCATGCAGAGGAG..... 279 19
.....GAAGGGGCATGCAGAGGAGC..... 2 20
.....AAGGGGCATGCAGAGGAG..... 29 18
.....AAGGGGCATGCAGAGGAGCAG..... 1 21
.....AAGGGGCATGCAGAGGAGCAGGA..... 2 23
.....AAGGGGCATGCAGAGGAGCAGGAG..... 1 24
.....AGGGGCATGCAGAGGAGCA..... 6 19
.....AGGGGCATGCAGAGGAGCAG..... 3 20
.....AGGGGCATGCAGAGGAGCAGG..... 3 21
.....AGGGGCATGCAGAGGAGCAGGA..... 2 22
.....GGGGCATGCAGAGGAGCAGG..... 1 20
.....GGGGCATGCAGAGGAGCAGGA..... 5 21
.....GGGGCATGCAGAGGAGCAGGAG..... 1 22
.....ATGCAGAGGAGCAGGAGATTCA..... 1 28
.....CAGGAGATTGAGTGAAGCTGCACTTC..... 1 21
.....TCTCTCTGCTTGCCTCTT

```

```

>osa-miR530-5p_MIMAT0006787_Oryza_sativa_miR530-5p
ACTGCATATATAGTGTAGTGTGCTACATATATATAGCAAGTGTGTGTATAGAGCTGCATTTGCACCTGCACCTACAGAGAGGAAGTGAAGCAGCAAGCTAGCAATAGTCTTGCCTATACGCTAGCTTC
*****TGCATTTGCACCTGCACCT*****

```

osa-miR530-5p 20

```

.....TAGAGCTGCATTTGCACCTGCAC..... 4 24
.....AGCTGCATTTGCACCTGCAC..... 1 21
.....CTGCATTTGCACCTGCACCTAC..... 5 22
.....TGCATTTGCACCTGCACCTAC..... 5 18
.....TGCATTTGCACCTGCACCT..... 4 19
.....TGCATTTGCACCTGCACCTA..... 4 20
.....TGCATTTGCACCTGCACCTAC..... 1276 21
.....TGCATTTGCACCTGCACCTACA..... 6 22
.....TGCATTTGCACCTGCACCTACAG..... 4 23
.....GCATTTGCACCTGCACCTAC..... 53 20
.....GCATTTGCACCTGCACCTACAG..... 1 22
.....ATTTGCACCTGCACCTAC..... 2 19
.....ATTTGCACCTGCACCTACAG..... 1 20
.....ACCTGCACCTACAGAGGAGATG..... 1 25

```

```

>osa-miR530-3p_MIMAT0002886_Oryza_sativa_miR530-3p
TTGATGCTATACGCTAGCTTCTTGACACAAATGTTGCTGCTCTCTCTGATCCTAGTGCAGAGGAGATGCAACTATGTGATGACTTCACATCCATCTTTAGTACTTACCACATATATCAATAAATTAGC
*****AGTGCAGAGGAGATGCAAC*****

```

osa-miR530-3p 21

```

.....TCCCTAGTGCAGAGGCAGATGCAAC..... 1 26
.....CCTAGTGCAGAGGCAGATGC..... 2 21
.....CCTAGTGCAGAGGCAGATGCA..... 6 22
.....CCTAGTGCAGAGGCAGATGCAA..... 3 23
.....CCTAGTGCAGAGGCAGATGCAAC..... 138 24
.....CTAGTGCAGAGGCAGATGCA..... 717 21
.....CTAGTGCAGAGGCAGATGCAAC..... 67 23
.....TAGTGCAGAGGCAGATGCA..... 23 20
.....TAGTGCAGAGGCAGATGCAAC..... 1 22
.....AGTGCAGAGGCAGATGCA..... 1 19
.....AGTGCAGAGGCAGATGCAA..... 10 20
.....AGTGCAGAGGCAGATGCAAC..... 408 21
.....AGTGCAGAGGCAGATGCAACT..... 2 22
.....GTCAGAGGCAGATGCAAC..... 15 20

```

```

>osa-miR535_MIMAT0003142_Oryza_sativa_miR535
GATTTCCTGCCCGCCAGCCGACGAGATTGGTGGTAAATTTGCTCGCCGGCCGGTGCACACGAGAGAGGACGCCGGTGCAGCGTGCAGCCGCCGCCGCTACCTCGCTTTCTCCCGTGG
*****TGAACGAGAGAGAGCACG*****
.....CGGTGACACGAGAGAGAGCA..... 4 21
.....CGGTGACACGAGAGAGAGCACG..... 1 24
.....TGACACGAGAGAGAGCA..... 25 18
.....TGACACGAGAGAGAGCAC..... 48 19
.....TGACACGAGAGAGAGCACG..... 144 20
.....TGACACGAGAGAGAGCACG..... 28084 21
.....TGACACGAGAGAGAGCACGCC..... 5 22
.....GACACGAGAGAGAGCAC..... 1 18
.....GACACGAGAGAGAGCACG..... 6 19
.....GACACGAGAGAGAGCACG..... 725 20
.....GACACGAGAGAGAGCACGCC..... 2 21
.....ACACGAGAGAGAGCACG..... 1 18
.....ACACGAGAGAGAGCACG..... 204 19
.....ACACGAGAGAGAGCACGCC..... 1 20
.....ACACGAGAGAGAGCACGCC..... 4 21
.....CAACGAGAGAGAGCACGCCG..... 6 21
.....AACGAGAGAGAGCACGCC..... 1 18
.....AACGAGAGAGAGCACGCCG..... 1 20
.....AACGAGAGAGAGCACGCCGGT..... 15 21
.....GGCTACTCGCTGCTTCTC..... 2 21

```

```

>osa-miR395p_MIMAT0003873_Oryza_sativa_miR395p
TTGGCATTGCTGAGTCCCTCAAGCACTCAGCTGCACATTTCAATGCGTACCGTGTGAAGTGTGGGGAACTCTCGCATCACCACAACTTAAATAATAGTGTAAAGCCACAATTTGAGTGAAGTCA
*****GTGAAGTGTGGGGAACTCT*****
.....GTTCCCTCAAGCACTCAGC..... 18 21
.....GTTCCCTCAAGCACTCAGCTGG..... 1 24
.....ACCGTGTGAAGTGTGGGGAA..... 1 22
.....TGAAGTGTGGGGAACTC..... 8 20
.....AGTGTGGGGAACTCTCGCAT..... 2 24
.....TGGGGAACTCTCGCATCACC..... 1 24
.....GGGGAACTCTCGCATCACC..... 1 23
.....GGGGAACTCTCGCATCACC..... 1 24
.....GGGGAACTCTCGCATCACC..... 1 25

```

```

>osa-miR395w_MIMAT0003877_Oryza_sativa_miR395w
TTGCTATTCTTGAGTCTCTTAATCATTACATGGCACTATTTAAGGCTACTGTGTGAAGTGTGGGGAACTCTCGGTATCACCATAAGTATGTTTCAAGCTATAAGAGATGGACCACTGTTGCAAGCCTA
*****GTGAAGTGTGGGGAACTCT*****
.....GGCCTACTGTGAGTGTGGG..... 1 24

```

```

>osa-miR806a_MIMAT0004026_Oryza_sativa_miR806a
CATGTACACATATAGTTTACGTATTTCAAAAAAATTTAATAAGCAAGCGTTAAACATGTCTAAAAAGTCAACGGTGCACAACTTTAAAACGAGGGAGTATTTGATTTGTGATGAAATGCATATATGCAAG
*****ATGTCTAAAAAGTCAACGGT*****
.....AAAAAATTTAATAAGCAAGC..... 2 24
.....AAAAAATTTAATAAGCAAGCG..... 1 24
.....AAAAAATTTAATAAGCAAGCG..... 1 23
.....TTAATAAGCAAGCGTTAA..... 3 21
.....TTAATAAGCAAGCGTTAAACAT..... 7 24
.....TAATAAGCAAGCGTTAAACAT..... 1 23
.....AATAAGCAAGCGTTAAAC..... 1 19
.....AATAAGCAAGCGTTAAAC..... 2 20
.....AATAAGCAAGCGTTAAACA..... 18 21
.....AATAAGCAAGCGTTAAACAT..... 9 22
.....AATAAGCAAGCGTTAAACATG..... 10 23
.....AATAAGCAAGCGTTAAACATGT..... 30 24
.....ATAAGCAAGCGTTAAAC..... 1 19
.....ATAAGCAAGCGTTAAACA..... 4 20
.....ATAAGCAAGCGTTAAACAT..... 20 21
.....ATAAGCAAGCGTTAAACATG..... 14 22
.....ATAAGCAAGCGTTAAACATGT..... 3 23
.....ATAAGCAAGCGTTAAACATGTG..... 25 24
.....TAAGCAAGCGTTAAACAT..... 1 20
.....TAAGCAAGCGTTAAACATG..... 4 21
.....TAAGCAAGCGTTAAACATGT..... 1 22
.....TAAGCAAGCGTTAAACATGTG..... 1 23
.....TAAGCAAGCGTTAAACATGTGC..... 5 24
.....AAGCAAGCGTTAAACATGTG..... 4 22
.....AAGCAAGCGTTAAACATGTGC..... 2 23
.....AAGCAAGCGTTAAACATGTGCT..... 40 24
.....AAGCAAGCGTTAAACATGTGCTAA..... 1 26
.....AGCAAGCGTTAAACATGTG..... 1 21
.....AGCAAGCGTTAAACATGTGCT..... 1 22
.....AGCAAGCGTTAAACATGTGCT..... 1 23
.....AGCAAGCGTTAAACATGTGCTA..... 53 24
.....AGCAAGCGTTAAACATGTGCTAA..... 1 25
.....GACGACGTTAAACATGTGCTA..... 1 21
.....GACGACGTTAAACATGTGCTA..... 2 23
.....GACGACGTTAAACATGTGCTAA..... 45 24
.....ACGACGTTAAACATGTGCT..... 1 20
.....ACGACGTTAAACATGTGCT..... 2 21
.....ACGACGTTAAACATGTGCTAA..... 11 24
.....CGAAGTTAAACATGTGCTA..... 1 21
.....CGAAGTTAAACATGTGCTA..... 1 23
.....AAGGTTAAACATGTGCTAAAA..... 1 23
.....ACGGTTAAACATGTGCTAAAAAGT..... 1 24
.....AAACATGTGCTAAAAAGT..... 1 19
.....AAACATGTGCTAAAAAGTCAA..... 1 21
.....AAACATGTGCTAAAAAGTCAACGG..... 110 24
.....AAACATGTGCTAAAAAGTCAACGG..... 3 23
.....AAACATGTGCTAAAAAGTCAACGGT..... 70 24
.....ACATGTGCTAAAAAGTCAACGGT..... 6 23

```



```

.....ACATGTGCTAAAAAGTCAACGGT..... 15 24
.....CATGTGCTAAAAAGTCAACGG..... 1 21
.....CATGTGCTAAAAAGTCAACGGTG..... 4 23
.....CATGTGCTAAAAAGTCAACGGTGT..... 4 24
.....ATGTGCTAAAAAGTCAACGGT..... 3 21
.....ATGTGCTAAAAAGTCAACGGTGT..... 2 23
.....ATGTGCTAAAAAGTCAACGGTGTCA..... 23 24
.....ATGTGCTAAAAAGTCAACGGTGTCAA..... 1 26
.....TGTGCTAAAAAGTCAACGGT..... 1 20
.....TGTGCTAAAAAGTCAACGGTG..... 43 21
.....TGTGCTAAAAAGTCAACGGTGT..... 4 22
.....GTGCTAAAAAGTCAACGGTG..... 3 20
.....GTGCTAAAAAGTCAACGGTGTCAA..... 4 24
.....TGTCTAAAAAGTCAACGGTGT..... 3 20
.....TGTCTAAAAAGTCAACGGTGTCT..... 5 21
.....TGTCTAAAAAGTCAACGGTGTCA..... 1 22
.....TGTCTAAAAAGTCAACGGTGTCAA..... 2 23
.....TGTCTAAAAAGTCAACGGTGTCAAA..... 1 24
.....GCTAAAAAGTCAACGGTG..... 1 18
.....GCTAAAAAGTCAACGGTGTCAA..... 1 22
.....GCTAAAAAGTCAACGGTGTCAAA..... 1 23
.....GCTAAAAAGTCAACGGTGTCAAAC..... 6 24
.....CTAAAAAGTCAACGGTGTCAA..... 5 21
.....CTAAAAAGTCAACGGTGTCAAA..... 2 22
.....TAAAAAGTCAACGGTGTCAA..... 7 21
.....TAAAAAGTCAACGGTGTCAACAT..... 8 24
.....AAAAAGTCAACGGTGTCAA..... 1 20
.....AAAAAGTCAACGGTGTCAAAC..... 3 21
.....AAAAAGTCAACGGTGTCAAAACA..... 5 22
.....AAAAAGTCAACGGTGTCAACAT..... 7 23
.....AAAAAGTCAACGGTGTCAACATT..... 120 24
.....AAAAAGTCAACGGTGTCAAAC..... 1 20
.....AAAAAGTCAACGGTGTCAAAACA..... 4 21
.....AAAAAGTCAACGGTGTCAACAT..... 4 23
.....AAAAAGTCAACGGTGTCAACATT..... 22 24
.....AAAAAGTCAACGGTGTCAAA..... 1 18
.....AAAGTCAACGGTGTCAAAC..... 2 19
.....AAAGTCAACGGTGTCAAAACA..... 2 20
.....AAAGTCAACGGTGTCAACAT..... 8 21
.....AAAGTCAACGGTGTCAACATT..... 4 22
.....AAAGTCAACGGTGTCAACATT..... 14 23
.....AAAGTCAACGGTGTCAACATT..... 4 24
.....AAGTCAACGGTGTCAACAT..... 3 20
.....AAGTCAACGGTGTCAACATT..... 8 21
.....AAGTCAACGGTGTCAACATT..... 1 22
.....AAGTCAACGGTGTCAACATT..... 3 23
.....AACGGTGTCAACATTAAAAACG..... 1 24
.....AACGGTGTCAACATTAAAAACGG..... 8 24
.....AACGGTGTCAACATTAAAAACGGAG..... 13 24
.....TGTCAACATTAAAAACGGAG..... 1 22
.....GTCAACATTAAAAACGGAGGGA..... 11 24
.....CAACATTAAAAACGGAGGAGT..... 1 24
.....ACATTTAAAAACGGAGGAGT..... 1 21

```

```

>osa-miR806b_MIMAT0004027_Oryza_sativa_miR806b
ATGTACACATATAATTTTACATATTTTCAAAATTTTTTAAATAAGACGAACAGTCAAGAATGTCTAAAAAGTCAACGGTGTCAACAGTTTGAACGGATGAAGTACTAAGCATGTATGGGAATGGCATGTTTCCAAAGT
*****ATGTGCTAAAAAGTCAACGGTG*****
.....ATATAATTTTACATATTTTCAAA..... 1 23
.....ATATAATTTTACATATTTTCAAA..... 1 24
.....ATGTGCTAAAAAGTCAACGGT..... 3 21
.....ATGTGCTAAAAAGTCAACGGTGT..... 2 23
.....ATGTGCTAAAAAGTCAACGGTGTCA..... 23 24
.....ATGTGCTAAAAAGTCAACGGTGTCAA..... 1 26
.....TGTGCTAAAAAGTCAACGGT..... 1 20
.....TGTGCTAAAAAGTCAACGGTG..... 43 21
.....TGTGCTAAAAAGTCAACGGTGT..... 4 22
.....GTGCTAAAAAGTCAACGGTG..... 3 20
.....GTGCTAAAAAGTCAACGGTGTCAA..... 4 24
.....TGTCTAAAAAGTCAACGGTGT..... 3 20
.....TGTCTAAAAAGTCAACGGTGTCT..... 5 21
.....TGTCTAAAAAGTCAACGGTGTCA..... 1 22
.....TGTCTAAAAAGTCAACGGTGTCAA..... 2 23
.....TGTCTAAAAAGTCAACGGTGTCAAA..... 1 24
.....GCTAAAAAGTCAACGGTG..... 1 18
.....GCTAAAAAGTCAACGGTGTCAA..... 1 22
.....GCTAAAAAGTCAACGGTGTCAAA..... 1 23
.....GCTAAAAAGTCAACGGTGTCAAAC..... 6 24
.....CTAAAAAGTCAACGGTGTCAA..... 5 21
.....CTAAAAAGTCAACGGTGTCAAA..... 2 22
.....TAAAAAGTCAACGGTGTCAA..... 7 21
.....TAAAAAGTCAACGGTGTCAA..... 1 20
.....AAAAAGTCAACGGTGTCAAAC..... 3 21
.....AAAAAGTCAACGGTGTCAAAACA..... 5 22
.....AAAAAGTCAACGGTGTCAAAC..... 1 20
.....AAAAAGTCAACGGTGTCAAAACA..... 4 21
.....AAAGTCAACGGTGTCAAA..... 1 18
.....AAAGTCAACGGTGTCAAAC..... 2 19
.....AAAGTCAACGGTGTCAAAACA..... 2 20
.....GTCAAACAGTTTGAACGGA..... 1 20

```

```

>osa-miR806c_MIMAT0004028_Oryza_sativa_miR806c
ATGTACACATATAGTTTACATATTTTCAAAATTTTTTGAATAAGACGAATGTTCAACATGTCTAAAAAGTCAACGGTGTCAACATTTCGAAACGGATGGAGTATTTTGTAACTTTATAAGAAAAGGGAAAAAAA
*****ATGTGCTAAAAAGTCAACGGTG*****
.....ATAAAATTTTTGAATAAGACGAA..... 2 24
.....AAAAATTTTTGAATAAGACGAA..... 2 22
.....AAAAATTTTTGAATAAGACGAAT..... 2 23
.....AAAAATTTTTGAATAAGACGAATG..... 1 24
.....AAAAATTTTTGAATAAGACGAAT..... 2 22
.....AAAAATTTTTGAATAAGACGAATG..... 7 23
.....AAAAATTTTTGAATAAGACGAATGG..... 4 24
.....AATTTTTTGAATAAGACGAAT..... 23 21
.....AATTTTTTGAATAAGACGAATG..... 3 22
.....AATTTTTTGAATAAGACGAATGG..... 1 23
.....AATTTTTTGAATAAGACGAATGGT..... 5 24
.....ATTTTTTGAATAAGACGAATG..... 2 21
.....ATTTTTTGAATAAGACGAATGG..... 1 22
.....TTTTTTGAATAAGACGAA..... 1 18
.....TTTTTTGAATAAGACGAATG..... 3 20
.....TTTTTTGAATAAGACGAATGG..... 15 21
.....TTTTTTGAATAAGACGAATGGT..... 4 22

```

TTTTTGAATAAGCGAATGGTCA	1	24
TTTTTGAATAAGCGAAT	1	18
TTTTTGAATAAGCGAATG	2	19
TTTTTGAATAAGCGAATGG	3	20
TTTTTGAATAAGCGAATGGT	13	21
TTTTTGAATAAGCGAATGGTCAA	5	24
TTTTTGAATAAGCGAATGGG	1	19
TTTTTGAATAAGCGAATGGT	1	20
TTTTTGAATAAGCGAATGGTCAA	2	23
TTTTTGAATAAGCGAATGGTCAAA	2	24
TTTTGAATAAGCGAATGGTCA	1	20
TTTTGAATAAGCGAATGGTCA	48	21
TTTTGAATAAGCGAATGGTCAA	4	22
TTTTGAATAAGCGAATGGTCAA	1	23
TTTTGAATAAGCGAATGGTCAAAC	4	24
TTGAATAAGCGAATGGT	1	18
TTGAATAAGCGAATGGTCA	1	20
TTGAATAAGCGAATGGTCAA	10	21
TTGAATAAGCGAATGGTCAAA	2	22
TTGAATAAGCGAATGGTCAAACA	8	24
TGAATAAGCGAATGGTCAAA	1	21
TGAATAAGCGAATGGTCAAACA	9	23
TGAATAAGCGAATGGTCAAACAT	35	24
TGAATAAGCGAATGGTCAAACATG	1	25
GAATAAGCGAATGGTCAAACATG	3	24
.AATAAGCGAATGGTCAAAC	1	19
.AATAAGCGAATGGTCAAACA	28	21
.AATAAGCGAATGGTCAAACAT	2	22
.AATAAGCGAATGGTCAAACATGT	2	24
.ATAAGCGAATGGTCAAAC	1	18
.ATAAGCGAATGGTCAAACA	13	20
.ATAAGCGAATGGTCAAACAT	58	21
.ATAAGCGAATGGTCAAACATG	17	22
.ATAAGCGAATGGTCAAACATGT	2	23
.ATAAGCGAATGGTCAAACATGTG	6	24
.TAAGCGAATGGTCAAACA	1	19
.TAAGCGAATGGTCAAACAT	9	20
.TAAGCGAATGGTCAAACATG	2	21
.TAAGCGAATGGTCAAACATGT	1	22
.TAAGCGAATGGTCAAACATGTG	1	24
.ACAGCAATGGTCAAACATGTG	4	21
.GACGAATGGTCAAACATGTGCTA	1	23
.ATGGTCAAACATGTGCTAAAAAGT	2	24
.GGTCAAACATGTGCTAAAAAGTCA	1	24
.GTCAAACATGTGCTAAAAAGTCA	1	23
.CAAACATGTGCTAAAAAGTCAACGG	1	25
.AAACATGTGCTAAAAAGTCA	1	19
.AAACATGTGCTAAAAAGTCAA	1	21
.AAACATGTGCTAAAAAGTCAACGG	110	24
.AACATGTGCTAAAAAGTCAACGG	3	23
.AACATGTGCTAAAAAGTCAACGGT	70	24
.ACATGTGCTAAAAAGTCAACGGT	6	23
.ACATGTGCTAAAAAGTCAACGGTG	15	24
.CATGTGCTAAAAAGTCAACGG	1	21
.CATGTGCTAAAAAGTCAACGGTG	4	23
.CATGTGCTAAAAAGTCAACGGTGT	4	24
.ATGTGCTAAAAAGTCAACGGT	3	21
.ATGTGCTAAAAAGTCAACGGTGT	2	23
.ATGTGCTAAAAAGTCAACGGTGTCA	23	24
.ATGTGCTAAAAAGTCAACGGTGTCAA	1	26
.TGTGCTAAAAAGTCAACGGT	1	20
.TGTGCTAAAAAGTCAACGGTG	43	21
.TGTGCTAAAAAGTCAACGGTGT	4	22
.GTGCTAAAAAGTCAACGGTGT	3	20
.GTGCTAAAAAGTCAACGGTGTCAA	4	24
.TGCTAAAAAGTCAACGGTGT	3	20
.TGCTAAAAAGTCAACGGTGTCA	5	21
.TGCTAAAAAGTCAACGGTGTCAA	1	22
.TGCTAAAAAGTCAACGGTGTCAA	2	23
.TGCTAAAAAGTCAACGGTGTCAA	1	24
.GCTAAAAAGTCAACGGTGT	1	18
.GCTAAAAAGTCAACGGTGTCAA	1	22
.GCTAAAAAGTCAACGGTGTCAA	1	23
.GCTAAAAAGTCAACGGTGTCAAAC	6	24
.CTAAAAAGTCAACGGTGTCAA	5	21
.CTAAAAAGTCAACGGTGTCAA	2	22
.TAAAAAGTCAACGGTGTCAA	7	21
.TAAAAAGTCAACGGTGTCAAACAT	8	24
.AAAAAGTCAACGGTGTCAA	1	20
.AAAAAGTCAACGGTGTCAAAC	3	21
.AAAAAGTCAACGGTGTCAAACA	5	22
.AAAAAGTCAACGGTGTCAAACAT	7	23
.AAAAAGTCAACGGTGTCAAACATT	120	24
.AAAAAGTCAACGGTGTCAAAC	1	20
.AAAAAGTCAACGGTGTCAAACA	4	21
.AAAAAGTCAACGGTGTCAAACATT	4	23
.AAAAAGTCAACGGTGTCAAACATTT	22	24
.AAAGTCAACGGTGTCAA	1	18
.AAAGTCAACGGTGTCAAAC	2	19
.AAAGTCAACGGTGTCAAACA	2	20
.AAAGTCAACGGTGTCAAACAT	8	21
.AAAGTCAACGGTGTCAAACATT	4	22
.AAAGTCAACGGTGTCAAACATTT	14	23
.AAAGTCAACGGTGTCAAACATTTTC	5	24
.AAGTCAACGGTGTCAAACAT	3	20
.AAGTCAACGGTGTCAAACATT	8	21
.AAGTCAACGGTGTCAAACATTT	1	22
.AAGTCAACGGTGTCAAACATTTTC	2	23
.AAGTCAACGGTGTCAAACATTTTCG	2	24
.AGTCAACGGTGTCAAACATTTTCGA	4	24
.GTCAACGGTGTCAAACATTTTCGAA	2	24
.AACGGTGTCAAACATTTTCGAA	1	21
.AACGGTGTCAAACATTTTCGAAACG	1	24
.AACGGTGTCAAACATTTTCGAAACGG	1	25
.ACGGTGTCAAACATTTTCGAAA	1	21
.ACGGTGTCAAACATTTTCGAAACG	1	23
.ACGGTGTCAAACATTTTCGAAACGG	30	24
.CGGTGTCAAACATTTTCGAAACGG	1	23
.GGTGTCAAACATTTTCGAAACGGAT	2	24
.TGTCAAACATTTTCGAAACGGGA	5	21
.TGTCAAACATTTTCGAAACGGAT	1	22
.GTCAAACATTTTCGAAACGGGA	1	20

```

.....AAACATTTGAAACGGATGGA..... 1 21
.....AAACATTTGAAACGGATGGAG..... 1 22
.....AAACATTTGAAACGGATGGAGT..... 1 23
.....ACATTTGAAACGGATGG..... 1 18

```

>osa-miR806d_MIMAT0004029_Oryza_sativa_miR806d

```

ATATGCACATATAGTTTACATATTTTCAAAATTTTTAGATAAAGCTAACGGTCAAAACATGTCTAAAAAGTCAACGGTGTCAAAATTTTAAACGGAGGGAGTATAAGGGATTTAGTGGATGTAATTCCTTTATA
*****ATGTGCTAAAAAGTCAACGGT*****
.....ACATATAGTTTACATATTTTCA..... 2 24
.....AGACTAACGGTCAAAACATGTCTA..... 1 24
.....AACCAGTCAAAACATGTCTA..... 3 21
.....AACCAGTCAAAACATGTCTA..... 1 22
.....AACCAGTCAAAACATGTCTA..... 2 23
.....AACCAGTCAAAACATGTCTA..... 4 24
.....AACCAGTCAAAACATGTCTA..... 3 21
.....AACCAGTCAAAACATGTCTA..... 8 24
.....CGGTCAAAACATGTCTA..... 1 24
.....GGTCAAAACATGTCTA..... 1 24
.....GTCAAAACATGTCTA..... 1 23
.....CAAAACATGTCTA..... 1 25
.....AAACATGTCTA..... 1 19
.....AAACATGTCTA..... 1 21
.....AAACATGTCTA..... 110 24
.....AAACATGTCTA..... 3 23
.....AAACATGTCTA..... 70 24
.....ACATGTCTA..... 6 23
.....ACATGTCTA..... 15 24
.....CATGTCTA..... 1 21
.....CATGTCTA..... 4 23
.....CATGTCTA..... 4 24
.....ATGTCTA..... 3 21
.....ATGTCTA..... 2 23
.....ATGTCTA..... 23 24
.....ATGTCTA..... 1 26
.....TGCTCAAAAGTCAACGGT..... 1 20
.....TGCTCAAAAGTCAACGGT..... 43 21
.....TGCTCAAAAGTCAACGGT..... 4 22
.....TGCTCAAAAGTCAACGGT..... 3 20
.....TGCTCAAAAGTCAACGGTCAAA..... 4 24
.....TGCTCAAAAGTCAACGGTGT..... 3 20
.....TGCTCAAAAGTCAACGGTGTCA..... 5 21
.....TGCTCAAAAGTCAACGGTGTCA..... 1 22
.....TGCTCAAAAGTCAACGGTGTCA..... 2 23
.....TGCTCAAAAGTCAACGGTGTCA..... 1 24
.....GCTCAAAAGTCAACGGT..... 1 18
.....GCTCAAAAGTCAACGGTGTCA..... 1 22
.....GCTCAAAAGTCAACGGTGTCA..... 1 23
.....GCTCAAAAGTCAACGGTGTCA..... 1 23
.....GCTCAAAAGTCAACGGTGTCA..... 6 24
.....CTAAAGTCAACGGTGTCA..... 5 21
.....CTAAAGTCAACGGTGTCA..... 2 22
.....TAAAGTCAACGGTGTCA..... 7 21
.....TAAAGTCAACGGTGTCAACAT..... 8 24
.....AAAAAGTCAACGGTGTCA..... 1 20
.....AAAAAGTCAACGGTGTCAAC..... 3 21
.....AAAAAGTCAACGGTGTCAACA..... 5 22
.....AAAAAGTCAACGGTGTCAACAT..... 7 23
.....AAAAAGTCAACGGTGTCAACATT..... 120 24
.....AAAAAGTCAACGGTGTCAAC..... 1 20
.....AAAAAGTCAACGGTGTCAACA..... 4 21
.....AAAAAGTCAACGGTGTCAACATT..... 4 23
.....AAAAAGTCAACGGTGTCAACATT..... 22 24
.....AAAGTCAACGGTGTCA..... 1 18
.....AAAGTCAACGGTGTCAAC..... 2 19
.....AAAGTCAACGGTGTCAACA..... 2 20
.....AAAGTCAACGGTGTCAACAT..... 8 21
.....AAAGTCAACGGTGTCAACATT..... 4 22
.....AAAGTCAACGGTGTCAACATT..... 14 23
.....AAAGTCAACGGTGTCAACATT..... 4 24
.....AAGTCAACGGTGTCAACAT..... 3 20
.....AAGTCAACGGTGTCAACATT..... 8 21
.....AAGTCAACGGTGTCAACATT..... 1 22
.....AAGTCAACGGTGTCAACATT..... 3 23
.....AACGGTGTCAACATTTTAAACG..... 1 24
.....ACGGTGTCAACATTTTAAACGG..... 8 24
.....GGTGTCAACATTTTAAACGGAG..... 13 24
.....TGTCAACATTTTAAACGGAG..... 1 22
.....GTCAACATTTTAAACGGAGGA..... 11 24
.....CAACATTTTAAACGGAGGAGT..... 1 24
.....ACATTTTAAACGGAGGAGT..... 1 21
.....CATTTTAAACGGAGGAGTATA..... 1 23
.....TATAAGGGATTTAGTGGAT..... 1 21
.....ATAAGGGATTTAGTGGATG..... 1 22

```

>osa-miR806e_MIMAT0004030_Oryza_sativa_miR806e

```

ATGTAGGCATATAATTTTACATATTTTCAAAAGTTTTTAAATAAAGCAACGGTCAAAACATGTCTAAAAAGTCAACGGTGTCAAAATTTTAAACGGAGGGAGTGTGGTTAGTGTCTAGAGTACGATCATCGGAGG
*****ATGTGCTAAAAAGTCAACGGT*****
ATGTAGGCATATAATTTTACATATTTTCAAA..... 2 21
.....ATATAATTTTACATATTTTCAAA..... 1 23
.....ATATAATTTTACATATTTTCAAAA..... 1 24
.....ACAAAAGTTTTTAAATAAAGCAAA..... 2 24
.....AAAAGTTTTTAAATAAAGCAAGC..... 1 24
.....GTTTTTAAATAAAGCAACGGTCA..... 1 24
.....TTTTTAAATAAAGCAAGCG..... 2 20
.....TTTTTAAATAAAGCAACGGT..... 5 21
.....TTTTTAAATAAAGCAACGGTCA..... 1 23
.....TTTTTAAATAAAGCAACGGT..... 1 20
.....TTTTTAAATAAAGCAACGGTCAAA..... 3 24
.....TTAAATAAAGCAACGGTCAAA..... 3 24
.....TAAATAAAGCAACGGTCAAA..... 1 23
.....TAAATAAAGCAACGGTCAAA..... 10 24
.....AAATAAAGCAACGGTCAAA..... 1 20
.....AAATAAAGCAACGGTCAAA..... 5 21
.....AAATAAAGCAACGGTCAAA..... 26 22
.....AAATAAAGCAACGGTCAAA..... 4 23
.....AAATAAAGCAACGGTCAAA..... 58 24
.....AATAAGCAACGGTCAAA..... 3 20
.....AATAAGCAACGGTCAAA..... 162 21
.....AATAAGCAACGGTCAAA..... 31 22
.....AATAAGCAACGGTCAAA..... 26 23
.....AATAAGCAACGGTCAAA..... 48 24

```

.....ATAAAGCGAAGGTCAAACATGTG.....	3	25
.....ATAAAGCGAAGGTCAAA.....	2	18
.....ATAAAGCGAAGGTCAAAC.....	3	19
.....ATAAAGCGAAGGTCAAACA.....	18	20
.....ATAAAGCGAAGGTCAAACAT.....	60	21
.....ATAAAGCGAAGGTCAAACATG.....	83	22
.....ATAAAGCGAAGGTCAAACATGT.....	23	23
.....ATAAAGCGAAGGTCAAACATGTG.....	69	24
.....TAAGCGAAGGTCAAAC.....	1	18
.....TAAGCGAAGGTCAAACA.....	1	19
.....TAAGCGAAGGTCAAACAT.....	2	20
.....TAAGCGAAGGTCAAACATG.....	14	21
.....TAAGCGAAGGTCAAACATGT.....	2	22
.....TAAGCGAAGGTCAAACATGTG.....	10	23
.....TAAGCGAAGGTCAAACATGTGC.....	19	24
.....AAGCGAAGGTCAAACA.....	1	18
.....AAGCGAAGGTCAAACAT.....	3	19
.....AAGCGAAGGTCAAACATG.....	3	20
.....AAGCGAAGGTCAAACATGT.....	1	21
.....AAGCGAAGGTCAAACATGTG.....	11	22
.....AAGCGAAGGTCAAACATGTGC.....	8	23
.....AAGCGAAGGTCAAACATGTGCT.....	59	24
.....AGCGAAGGTCAAACATGTG.....	12	21
.....AGCGAAGGTCAAACATGTGC.....	5	22
.....AGCGAAGGTCAAACATGTGCT.....	1	23
.....AGCGAAGGTCAAACATGTGCTA.....	54	24
.....AGCGAAGGTCAAACATGTGCTAA.....	1	25
.....GACGAAGGTCAAACATGTG.....	2	20
.....GACGAAGGTCAAACATGTGCTA.....	1	23
.....GACGAAGGTCAAACATGTGCTAA.....	4	24
.....ACGAAGGTCAAACATGTGCT.....	5	21
.....ACGAAGGTCAAACATGTGCTA.....	1	22
.....ACGAAGGTCAAACATGTGCTAA.....	7	23
.....ACGAAGGTCAAACATGTGCTAAA.....	11	24
.....CGAAGGTCAAACATGTGCTA.....	8	21
.....CGAAGGTCAAACATGTGCTAA.....	1	22
.....CGAAGGTCAAACATGTGCTAAA.....	1	23
.....CGAAGGTCAAACATGTGCTAAAA.....	4	24
.....GAAGGTCAAACATGTGCTA.....	1	20
.....GAAGGTCAAACATGTGCTAA.....	2	21
.....AACGGTCAAACATGTGCTAAA.....	3	21
.....AACGGTCAAACATGTGCTAAAA.....	1	22
.....AACGGTCAAACATGTGCTAAAAA.....	2	23
.....AACGGTCAAACATGTGCTAAAAAG.....	4	24
.....ACGGTCAAACATGTGCTAAAA.....	3	21
.....ACGGTCAAACATGTGCTAAAAAGT.....	8	24
.....CGTCAAAACATGTGCTAAAAAGTC.....	1	24
.....GGTCAAAACATGTGCTAAAAAGTCA.....	1	24
.....GTCAAAACATGTGCTAAAAAGTCA.....	1	23
.....CAAAACATGTGCTAAAAAGTCAACGG.....	1	25
.....AAACATGTGCTAAAAAGTCA.....	1	19
.....AAACATGTGCTAAAAAGTCAA.....	1	21
.....AAACATGTGCTAAAAAGTCAACGG.....	110	24
.....AACATGTGCTAAAAAGTCAACGG.....	3	23
.....AACATGTGCTAAAAAGTCAACGGT.....	70	24
.....ACATGTGCTAAAAAGTCAACGGT.....	6	23
.....ACATGTGCTAAAAAGTCAACGGTG.....	15	24
.....CATGTGCTAAAAAGTCAACGG.....	1	21
.....CATGTGCTAAAAAGTCAACGGTG.....	4	23
.....CATGTGCTAAAAAGTCAACGGTGT.....	4	24
.....ATGTGCTAAAAAGTCAACGGT.....	3	21
.....ATGTGCTAAAAAGTCAACGGTGT.....	2	23
.....ATGTGCTAAAAAGTCAACGGTGTG.....	23	24
.....ATGTGCTAAAAAGTCAACGGTGTCAA.....	1	26
.....TGTGCTAAAAAGTCAACGGT.....	1	20
.....TGTGCTAAAAAGTCAACGGTG.....	4	21
.....TGTGCTAAAAAGTCAACGGTGT.....	4	22
.....TGTGCTAAAAAGTCAACGGTG.....	3	20
.....GTGCTAAAAAGTCAACGGTGTCAA.....	4	24
.....TGTAAAAAGTCAACGGTGT.....	3	20
.....TGTAAAAAGTCAACGGTGTG.....	5	21
.....TGTAAAAAGTCAACGGTGTCA.....	1	22
.....TGTAAAAAGTCAACGGTGTCAA.....	2	23
.....TGTAAAAAGTCAACGGTGTCAA.....	1	24
.....GCTAAAAAGTCAACGGTGTCAA.....	1	18
.....GCTAAAAAGTCAACGGTGTCAA.....	1	22
.....GCTAAAAAGTCAACGGTGTCAA.....	1	23
.....GCTAAAAAGTCAACGGTGTCAAAT.....	3	24
.....CTAAAAAGTCAACGGTGTCAA.....	5	21
.....CTAAAAAGTCAACGGTGTCAA.....	2	22
.....TAAAAAGTCAACGGTGTCAA.....	7	21
.....TAAAAAGTCAACGGTGTCAAAT.....	1	22
.....TAAAAAGTCAACGGTGTCAAATAT.....	2	24
.....AAAAAGTCAACGGTGTCAA.....	1	20
.....AAAAAGTCAACGGTGTCAAAT.....	3	21
.....AAAAAGTCAACGGTGTCAAATA.....	2	22
.....AAAAAGTCAACGGTGTCAAATTT.....	22	24
.....AAAAAGTCAACGGTGTCAAATA.....	2	21
.....AAAAAGTCAACGGTGTCAA.....	1	18
.....AAGTCAACGGTGTCAAATTTTCG.....	1	24
.....AGTCAACGGTGTCAAATTTTC.....	1	21
.....AGTCAACGGTGTCAAATTTTC.....	1	22
.....GTCAACGGTGTCAAATTTTCGAA.....	2	24
.....AACGGTGTCAAATTTTCGAAACG.....	2	24
.....ACGGTGTCAAATTTTCGAAACGG.....	6	24
.....TGTCAAATTTTCGAAACGGA.....	2	21
.....TGTCAAATTTTCGAAACGGAGGG.....	1	24
.....GTCAAATTTTCGAAACGGAGGG.....	1	23
.....GTCAAATTTTCGAAACGGAGGGA.....	3	24
.....CAAATTTTCGAAACGGAGGGAG.....	1	23
.....AAATTTTCGAAACGGAGGG.....	2	20
.....AAATTTTCGAAACGGAGGGA.....	1	21
.....AATTTTCGAAACGGAGGGA.....	1	20
.....ATTTTCGAAACGGAGGGAGT.....	1	21
.....TTTCGAAACGGAGGGAGT.....	2	18

>osa-miR806f_MIMAT0004031_Oryza_sativa_miR806f

ATGTAGGCATATAATTTACATATTTTCAAAAAGTTTTGAATAAGACGAACAGTCAACATGTGCTAAAAAGTCAACGGTGTCAAATTTTCGAAACGGAGGGAGTAAAGCCTTTTACCTTCAAGATTCAAGATTGGT
 *****ATGTGCTAAAAAGTCAACGGT*****
 ATGTAGGCATATAATTTTACA.....
 ..ATATAATTTTACATATTTTCATAA.....

osa-miR806f 22
 2 21
 1 23

.....TAATTTACATATTTCAAAAAG.....	1	23
.....ATATTTTCATAAAAAGTTTTGAATA.....	3	24
.....ATAAAAAGTTTTGAATAAAGCGA.....	1	23
.....ATAAAAAGTTTTGAATAAAGCGAA.....	4	24
.....TAAAAAGTTTTGAATAAAGCGAA.....	1	23
.....AAAAAGTTTTGAATAAAGCGAA.....	1	22
.....AAAAAGTTTTGAATAAAGCGAACA.....	5	24
.....AAAAAGTTTTGAATAAAGCGAACA.....	1	23
.....TTTTTGAATAAAGCGAAGCAG.....	1	20
.....TTTTTGAATAAAGCGAAGCAGT.....	2	21
.....TTTTTGAATAAAGCGAAGCAGTCAA.....	1	24
.....TTTTTGAATAAAGCGAACA.....	1	18
.....TTTTTGAATAAAGCGAAGCAGTCA.....	1	22
.....TTGAATAAAGCGAAGCAGTCAAAAC.....	1	23
.....TGAATAAAGCGAAGCAGTCAAAACAT.....	3	24
.....AATAAAGCGAAGCAGTCAAAACATGT.....	2	24
.....ATAAAGCGAAGCAGTCAAAAC.....	1	19
.....ATAAAGCGAAGCAGTCAAAACAT.....	1	21
.....ATAAAGCGAAGCAGTCAAAACATGTG.....	1	24
.....AGCAGAACAGTCAAAACATGTGCTA.....	1	24
.....GTCAAAACATGTGCTAAAAAGTCA.....	1	23
.....CAAAACATGTGCTAAAAAGTCAACGG.....	1	25
.....AAACATGTGCTAAAAAGTCA.....	1	19
.....AAACATGTGCTAAAAAGTCAAA.....	1	21
.....AAACATGTGCTAAAAAGTCAACGG.....	110	24
.....AAACATGTGCTAAAAAGTCAACGG.....	3	23
.....AAACATGTGCTAAAAAGTCAACGGT.....	70	24
.....ACATGTGCTAAAAAGTCAACGGT.....	6	23
.....ACATGTGCTAAAAAGTCAACGGTG.....	15	24
.....CATGTGCTAAAAAGTCAACGG.....	1	21
.....CATGTGCTAAAAAGTCAACGGTG.....	4	23
.....CATGTGCTAAAAAGTCAACGGTGT.....	4	24
.....ATGTGCTAAAAAGTCAACGGT.....	3	21
.....ATGTGCTAAAAAGTCAACGGTGT.....	2	23
.....ATGTGCTAAAAAGTCAACGGTGTCA.....	23	24
.....ATGTGCTAAAAAGTCAACGGTGTCAA.....	1	26
.....TGTGCTAAAAAGTCAACGGT.....	1	20
.....TGTGCTAAAAAGTCAACGGTG.....	43	21
.....TGTGCTAAAAAGTCAACGGTGT.....	4	22
.....GTGCTAAAAAGTCAACGGTG.....	3	20
.....GTGCTAAAAAGTCAACGGTGTCAA.....	4	24
.....TGCTAAAAAGTCAACGGTGT.....	3	20
.....TGCTAAAAAGTCAACGGTGTCA.....	5	21
.....TGCTAAAAAGTCAACGGTGTCA.....	1	22
.....TGCTAAAAAGTCAACGGTGTCAA.....	2	23
.....TGCTAAAAAGTCAACGGTGTCAAA.....	1	24
.....GCTAAAAAGTCAACGGTG.....	1	18
.....GCTAAAAAGTCAACGGTGTCAA.....	1	22
.....GCTAAAAAGTCAACGGTGTCAA.....	1	23
.....GCTAAAAAGTCAACGGTGTCAAAAT.....	3	24
.....CTAAAAAGTCAACGGTGTCAA.....	5	21
.....CTAAAAAGTCAACGGTGTCAA.....	2	22
.....TAAAAAGTCAACGGTGTCAA.....	7	21
.....TAAAAAGTCAACGGTGTCAAAAT.....	1	22
.....TAAAAAGTCAACGGTGTCAAAATAT.....	2	24
.....AAAAAGTCAACGGTGTCAA.....	1	20
.....AAAAAGTCAACGGTGTCAAAAT.....	3	21
.....AAAAAGTCAACGGTGTCAAAATA.....	2	22
.....AAAAAGTCAACGGTGTCAAAATAT.....	22	24
.....AAAAAGTCAACGGTGTCAAAATA.....	2	21
.....AAAGTCAACGGTGTCAA.....	1	18
.....AAAGTCAACGGTGTCAAAATTTG.....	1	24
.....AGTCAACGGTGTCAAAATTTG.....	1	21
.....AGTCAACGGTGTCAAAATTTTC.....	1	22
.....GTCAACGGTGTCAAAATTTTCGAA.....	2	24
.....AACGGTGTCAAAATTTTCGAAACG.....	2	24
.....ACGGTGTCAAAATTTTCGAAACGG.....	6	24
.....TGCAAAATTTTCGAAACGGA.....	2	21
.....TGCAAAATTTTCGAAACGGAGGG.....	1	24
.....GTCAAAATTTTCGAAACGGAGGG.....	1	23
.....GTCAAAATTTTCGAAACGGAGGGGA.....	3	24
.....CAAAATTTTCGAAACGGAGGGAG.....	1	23
.....AAATTTTCGAAACGGAGGG.....	2	20
.....AAATTTTCGAAACGGAGGGGA.....	1	21
.....AAATTTTCGAAACGGAGGGGA.....	1	20
.....ATATTTTCGAAACGGAGGGAGT.....	1	21
.....ATTTTCGAAACGGAGGGAGTA.....	1	20
.....TTTTCGAAACGGAGGGAGT.....	2	18
.....TTTTCGAAACGGAGGGAGTAT.....	1	20

>osa-miR806g_MIMAT0004032_Oryza_sativa_miR806g

ATGTACACATGTAGTTTACATATTTCACTAACTTTTTGAATAAAGCGAACGGTCAAAACATGTGCTAAAAAGTCAACGGTGTCAAAACATTTTGAACGGAGGGAGTACTCTACTATAGTTTATTTTTAATTTACTACTTT	*****ATGTGCTAAAAAGTCAACGGT*****	osa-miR806g	22
.....ACTAACTTTTTGAATAAAGCGAA.....	.....	1	24
.....AACTTTTTGAATAAAGCGAACGG.....	.....	11	24
.....ACTTTTTGAATAAAGCGAACGGT.....	.....	10	24
.....CTTTTTGAATAAAGCGAACGGT.....	.....	1	23
.....TTTTTGAATAAAGCGAA.....	.....	1	18
.....TTTTTGAATAAAGCGAACGG.....	.....	42	21
.....TTTTTGAATAAAGCGAACGGT.....	.....	6	22
.....TTTTTGAATAAAGCGAACGGTCA.....	.....	3	23
.....TTTTTGAATAAAGCGAACGG.....	.....	2	19
.....TTTTTGAATAAAGCGAACGG.....	.....	2	20
.....TTTTTGAATAAAGCGAACGGT.....	.....	83	21
.....TTTTTGAATAAAGCGAACGGTC.....	.....	4	22
.....TTTTTGAATAAAGCGAACGGTCA.....	.....	6	23
.....TTTTTGAATAAAGCGAACGGTCAA.....	.....	13	24
.....TTTTTGAATAAAGCGAACGGTCAAA.....	.....	1	25
.....TTTTTGAATAAAGCGAACGG.....	.....	2	19
.....TTTTTGAATAAAGCGAACGGT.....	.....	13	20
.....TTTTTGAATAAAGCGAACGGTCA.....	.....	2	21
.....TTTTTGAATAAAGCGAACGGTCA.....	.....	5	22
.....TTTTTGAATAAAGCGAACGGTCAA.....	.....	6	23
.....TTTTTGAATAAAGCGAACGGTCAAA.....	.....	8	24
.....TTTGAATAAAGCGAACGG.....	.....	1	18
.....TTTGAATAAAGCGAACGGT.....	.....	11	19
.....TTTGAATAAAGCGAACGGTCA.....	.....	1	20
.....TTTGAATAAAGCGAACGGTCA.....	.....	9	21
.....TTTGAATAAAGCGAACGGTCAA.....	.....	9	22
.....TTTGAATAAAGCGAACGGTCAAA.....	.....	5	23
.....TTTGAATAAAGCGAACGGTCAAA.....	.....	27	24

TTTGAATAAGACGAACGGTCAAAACA	2	25
TTGAATAAGACGAACGGT	2	18
TTGAATAAGACGAACGGTCA	3	20
TTGAATAAGACGAACGGTCAA	4	21
TTGAATAAGACGAACGGTCAAA	2	22
TTGAATAAGACGAACGGTCAAAC	4	23
TTGAATAAGACGAACGGTCAAAACA	45	24
TGAATAAGACGAACGGTCAA	1	20
TGAATAAGACGAACGGTCAAA	1	21
TGAATAAGACGAACGGTCAAAC	6	22
TGAATAAGACGAACGGTCAAAACA	29	23
TGAATAAGACGAACGGTCAAAACAT	182	24
TGAATAAGACGAACGGTCAAAACATG	1	25
GAATAAGACGAACGGTCAAA	1	20
GAATAAGACGAACGGTCAAAACA	46	22
GAATAAGACGAACGGTCAAAACAT	14	23
GAATAAGACGAACGGTCAAAACATG	130	24
AATAAGACGAACGGTCAAAAC	3	20
AATAAGACGAACGGTCAAAACA	162	21
AATAAGACGAACGGTCAAAACAT	31	22
AATAAGACGAACGGTCAAAACATG	26	23
AATAAGACGAACGGTCAAAACATGT	48	24
AATAAGACGAACGGTCAAAACATGTG	3	25
ATAAGACGAACGGTCAAA	2	18
ATAAGACGAACGGTCAAAC	3	19
ATAAGACGAACGGTCAAAACA	18	20
ATAAGACGAACGGTCAAAACAT	60	21
ATAAGACGAACGGTCAAAACATG	83	22
ATAAGACGAACGGTCAAAACATGT	23	23
ATAAGACGAACGGTCAAAACATGTG	69	24
TAAGACGAACGGTCAAAC	1	18
TAAGACGAACGGTCAAAACA	1	19
TAAGACGAACGGTCAAAACAT	2	20
TAAGACGAACGGTCAAAACATG	14	21
TAAGACGAACGGTCAAAACATGT	2	22
TAAGACGAACGGTCAAAACATGTG	10	23
TAAGACGAACGGTCAAAACATGTGC	19	24
AAGACGAACGGTCAAAACA	1	18
AAGACGAACGGTCAAAACAT	3	19
AAGACGAACGGTCAAAACATG	3	20
AAGACGAACGGTCAAAACATGT	1	21
AAGACGAACGGTCAAAACATGTG	11	22
AAGACGAACGGTCAAAACATGTGC	8	23
AAGACGAACGGTCAAAACATGTGCT	59	24
AGACGAACGGTCAAAACATGTG	12	21
AGACGAACGGTCAAAACATGTGC	5	22
AGACGAACGGTCAAAACATGTGCT	1	23
AGACGAACGGTCAAAACATGTGCTA	54	24
AGACGAACGGTCAAAACATGTGCTAA	1	25
GACGAACGGTCAAAACATGTG	2	20
GACGAACGGTCAAAACATGTGCTA	1	23
GACGAACGGTCAAAACATGTGCTAA	4	24
ACGAACGGTCAAAACATGTGCT	5	21
ACGAACGGTCAAAACATGTGCTA	1	22
ACGAACGGTCAAAACATGTGCTAA	7	23
ACGAACGGTCAAAACATGTGCTAAA	11	24
CGAACGGTCAAAACATGTGCTA	8	21
CGAACGGTCAAAACATGTGCTAA	1	22
CGAACGGTCAAAACATGTGCTAAA	1	23
CGAACGGTCAAAACATGTGCTAAAA	4	24
GAACGGTCAAAACATGTGCTA	1	20
GAACGGTCAAAACATGTGCTAA	2	21
AACGGTCAAAACATGTGCTAAA	3	21
AACGGTCAAAACATGTGCTAAAA	1	22
AACGGTCAAAACATGTGCTAAAAA	2	23
AACGGTCAAAACATGTGCTAAAAAG	4	24
ACGGTCAAAACATGTGCTAAAAA	3	21
ACGGTCAAAACATGTGCTAAAAAGT	8	24
CGTCAAAACATGTGCTAAAAAGTC	1	24
GCTCAAAACATGTGCTAAAAAGTCA	1	24
GCTCAAAACATGTGCTAAAAAGTCA	1	23
CAAAACATGTGCTAAAAAGTCAACGG	1	25
AAACATGTGCTAAAAAGTCA	1	19
AAACATGTGCTAAAAAGTCAA	1	21
AAACATGTGCTAAAAAGTCAACGG	110	24
AAACATGTGCTAAAAAGTCAACGGT	3	23
AAACATGTGCTAAAAAGTCAACGGT	70	24
ACATGTGCTAAAAAGTCAACGGT	6	23
ACATGTGCTAAAAAGTCAACGGTG	15	24
CATGTGCTAAAAAGTCAACGGT	1	21
CATGTGCTAAAAAGTCAACGGTG	4	23
CATGTGCTAAAAAGTCAACGGTGT	4	24
ATGTGCTAAAAAGTCAACGGT	3	21
ATGTGCTAAAAAGTCAACGGTGT	2	23
ATGTGCTAAAAAGTCAACGGTGTG	23	24
ATGTGCTAAAAAGTCAACGGTGTCAA	1	26
TGTGCTAAAAAGTCAACGGT	1	20
TGTGCTAAAAAGTCAACGGTG	43	21
TGTGCTAAAAAGTCAACGGTGT	4	22
TGTGCTAAAAAGTCAACGGTG	3	20
TGTGCTAAAAAGTCAACGGTG	4	24
TGTGCTAAAAAGTCAACGGTGTCAA	3	20
TGTGCTAAAAAGTCAACGGTGTG	5	21
TGTGCTAAAAAGTCAACGGTGTCA	1	22
TGTGCTAAAAAGTCAACGGTGTCAA	2	23
TGTGCTAAAAAGTCAACGGTGTCAA	1	24
GCTAAAAAGTCAACGGTGTCAA	1	18
GCTAAAAAGTCAACGGTGTCAA	1	22
GCTAAAAAGTCAACGGTGTCAA	1	23
GCTAAAAAGTCAACGGTGTCAAAC	6	24
CTAAAAAGTCAACGGTGTCAA	5	21
CTAAAAAGTCAACGGTGTCAA	2	22
TAAAAAGTCAACGGTGTCAA	7	21
TAAAAAGTCAACGGTGTCAAACAT	8	24
AAAAAGTCAACGGTGTCAA	1	20
AAAAAGTCAACGGTGTCAAAC	3	21
AAAAAGTCAACGGTGTCAAACA	5	22
AAAAAGTCAACGGTGTCAAACAT	7	23
AAAAAGTCAACGGTGTCAAACATT	120	24
AAAAAGTCAACGGTGTCAAAC	1	20
AAAAAGTCAACGGTGTCAAACA	4	21
AAAAAGTCAACGGTGTCAAACATT	4	23

.....AAAAGTCAACGGTGTCAAAACATTT.....	22	24
.....AAAGTCAACGGTGTCAAAA.....	1	18
.....AAAGTCAACGGTGTCAAAAC.....	2	19
.....AAAGTCAACGGTGTCAAAACA.....	2	20
.....AAAGTCAACGGTGTCAAAACAT.....	8	21
.....AAAGTCAACGGTGTCAAAACATT.....	4	22
.....AAAGTCAACGGTGTCAAAACATTT.....	14	23
.....AAAGTCAACGGTGTCAAAACATTTT.....	4	24
.....AAGTCAACGGTGTCAAAACAT.....	3	20
.....AAGTCAACGGTGTCAAAACATT.....	8	21
.....AAGTCAACGGTGTCAAAACATTT.....	1	22
.....AAGTCAACGGTGTCAAAACATTTT.....	3	23
.....AAGTCAACGGTGTCAAAACATTTTG.....	1	24
.....AGTCAACGGTGTCAAAACATTTTGA.....	3	24
.....AGTCAACGGTGTCAAAACATTTTGAAA.....	1	26
.....GTCAACGGTGTCAAAACATTTTGAAA.....	6	24
.....TCAACGGTGTCAAAACATTTTG.....	2	21
.....CAACGGTGTCAAAACATTTTGAA.....	1	22
.....AACGGTGTCAAAACATTTTGAA.....	2	21
.....AACGGTGTCAAAACATTTTGAAA.....	1	22
.....AACGGTGTCAAAACATTTTGAAACG.....	5	24
.....ACGGTGTCAAAACATTTTGAAACGG.....	5	24
.....GGTGTCAAAACATTTTGAAACGGAG.....	15	24
.....GTGTCAAAACATTTTGAAACGGAGG.....	1	24
.....TGTCAAAACATTTTGAAACGGGA.....	6	21
.....TGTCAAAACATTTTGAAACGGAGGG.....	2	24
.....GTCAAAACATTTTGAAACGGAG.....	1	21
.....GTCAAAACATTTTGAAACGGAGGG.....	1	23
.....GTCAAAACATTTTGAAACGGAGGGA.....	9	24
.....TCAAAACATTTTGAAACGGAGG.....	17	21
.....TCAAAACATTTTGAAACGGAGGGAG.....	1	24
.....CAAAACATTTTGAAACGGAGGGA.....	1	22
.....CAAAACATTTTGAAACGGAGGGAG.....	5	23
.....CAAAACATTTTGAAACGGAGGGAGT.....	4	24
.....AAACATTTTGAAACGGAGGG.....	2	19
.....AAACATTTTGAAACGGAGGGA.....	6	21
.....AAACATTTTGAAACGGAGGGAGTA.....	3	24
.....AACATTTTGAAACGGAGGG.....	1	19
.....AACATTTTGAAACGGAGGGAG.....	1	21
.....AACATTTTGAAACGGAGGGAGTA.....	2	23
.....ACATTTTGAAACGGAGGGAGTA.....	1	22
.....CATTTTGAAACGGAGGGAGTAC.....	1	22
.....TTTGAACGGAGGGAGT.....	1	18

>osa-miR806h_MIMAT0004033_Oryza_sativa_miR806h

ATGTAGGCATATAATTTACATATCTCACAAAAGTTTTGAATAAGACGAATGGTCAAAACATGTGCTAAAAAGTCAACGGTGTCAAAACATTTAGAAAACGGAGGGAGTAGTATGTTTATTCGCTTCAGATGGATGCCAGGT

*****ATGTGCTAAAAAGTCAACGGTG*****

ATGTAGGCATATAATTTACATATA.....	2	21
.....ATTTTACATATCTCACAAAAGTTT.....	1	24
.....TCACAAAAGTTTTGAATAAGACG.....	1	24
.....CACAAAAGTTTTGAATAAGACGA.....	2	24
.....ACAAAAGTTTTGAATAAGACGA.....	1	23
.....ACAAAAGTTTTGAATAAGACGAA.....	4	24
.....CAAAAAGTTTTGAATAAGACGA.....	1	22
.....AAAAGTTTTGAATAAGACGAA.....	1	22
.....AAAAGTTTTGAATAAGACGAATG.....	2	24
.....AAAAGTTTTGAATAAGACGAATG.....	1	23
.....AGTTTTGAATAAGACGAATGGT.....	1	23
.....AGTTTTGAATAAGACGAATGGTC.....	1	24
.....TTTTGAATAAGACGAAT.....	1	18
.....TTTTGAATAAGACGAATG.....	2	19
.....TTTTGAATAAGACGAATGG.....	3	20
.....TTTTGAATAAGACGAATGGT.....	13	21
.....TTTTGAATAAGACGAATGGTCAA.....	5	24
.....TTTTGAATAAGACGAATGG.....	1	19
.....TTTTGAATAAGACGAATGGT.....	1	20
.....TTTTGAATAAGACGAATGGTCAA.....	2	23
.....TTTTGAATAAGACGAATGGTCAA.....	2	24
.....TTTGAATAAGACGAATGGTC.....	1	20
.....TTTGAATAAGACGAATGGTCA.....	48	21
.....TTTGAATAAGACGAATGGTCAA.....	4	22
.....TTTGAATAAGACGAATGGTCAA.....	1	23
.....TTTGAATAAGACGAATGGTCAAAC.....	4	24
.....TTGAATAAGACGAATGGT.....	1	18
.....TTGAATAAGACGAATGGTCA.....	1	20
.....TTGAATAAGACGAATGGTCAA.....	10	21
.....TTGAATAAGACGAATGGTCAA.....	2	22
.....TTGAATAAGACGAATGGTCAAACA.....	8	24
.....TGAATAAGACGAATGGTCAA.....	1	21
.....TGAATAAGACGAATGGTCAAACA.....	9	23
.....TGAATAAGACGAATGGTCAAACAT.....	35	24
.....TGAATAAGACGAATGGTCAAACATG.....	1	25
.....GAATAAGACGAATGGTCAAACATG.....	3	24
.....AATAAGACGAATGGTCAA.....	1	19
.....AATAAGACGAATGGTCAAACA.....	28	21
.....AATAAGACGAATGGTCAAACAT.....	2	22
.....AATAAGACGAATGGTCAAACATGT.....	2	24
.....ATAAGACGAATGGTCAA.....	1	18
.....ATAAGACGAATGGTCAAACA.....	13	20
.....ATAAGACGAATGGTCAAACAT.....	58	21
.....ATAAGACGAATGGTCAAACATG.....	17	22
.....ATAAGACGAATGGTCAAACATGT.....	2	23
.....ATAAGACGAATGGTCAAACATGTG.....	6	24
.....TAAGACGAATGGTCAAACA.....	1	19
.....TAAGACGAATGGTCAAACAT.....	3	20
.....TAAGACGAATGGTCAAACATG.....	2	21
.....TAAGACGAATGGTCAAACATGT.....	1	22
.....TAAGACGAATGGTCAAACATGTG.....	1	24
.....AGACGAATGGTCAAACATGTG.....	4	21
.....GACGAATGGTCAAACATGTGCTA.....	1	23
.....ATGGTCAAACATGTGCTAAAAAGT.....	2	24
.....GGTCAAACATGTGCTAAAAAGTCA.....	1	24
.....GTCAAACATGTGCTAAAAAGTCA.....	1	23
.....CAAACATGTGCTAAAAAGTCAACGG.....	1	25
.....AAACATGTGCTAAAAAGTCA.....	1	19
.....AAACATGTGCTAAAAAGTCAA.....	1	21
.....AAACATGTGCTAAAAAGTCAACGG.....	110	24
.....AACATGTGCTAAAAAGTCAACGG.....	3	23
.....AACATGTGCTAAAAAGTCAACGGT.....	70	24
.....ACATGTGCTAAAAAGTCAACGGT.....	6	23
.....ACATGTGCTAAAAAGTCAACGGTG.....	15	24

osa-miR806h

22

```

.....CATGCTAAAAAGTCAACGG..... 1 21
.....CATGCTAAAAAGTCAACGGT..... 4 23
.....CATGCTAAAAAGTCAACGGTGT..... 4 24
.....ATGCTAAAAAGTCAACGGT..... 3 21
.....ATGCTAAAAAGTCAACGGTGT..... 2 23
.....ATGCTAAAAAGTCAACGGTGT..... 23 24
.....ATGCTAAAAAGTCAACGGTGTCAA..... 1 26
.....TGCTAAAAAGTCAACGGT..... 1 20
.....TGCTAAAAAGTCAACGGTGT..... 43 21
.....TGCTAAAAAGTCAACGGTGT..... 4 22
.....TGCTAAAAAGTCAACGGTGT..... 3 20
.....TGCTAAAAAGTCAACGGTGTCAA..... 4 24
.....TGCTAAAAAGTCAACGGTGT..... 3 20
.....TGCTAAAAAGTCAACGGTGT..... 5 21
.....TGCTAAAAAGTCAACGGTGTCA..... 1 22
.....TGCTAAAAAGTCAACGGTGTCAA..... 2 23
.....TGCTAAAAAGTCAACGGTGTCAA..... 1 24
.....GCTAAAAAGTCAACGGTGT..... 1 18
.....GCTAAAAAGTCAACGGTGTCAA..... 1 22
.....GCTAAAAAGTCAACGGTGTCAA..... 1 23
.....GCTAAAAAGTCAACGGTGTCAAC..... 6 24
.....CTAAAAAGTCAACGGTGTCAA..... 5 21
.....CTAAAAAGTCAACGGTGTCAA..... 2 22
.....TAAAAAGTCAACGGTGTCAA..... 7 21
.....TAAAAAGTCAACGGTGTCAACAT..... 8 24
.....AAAAAGTCAACGGTGTCAA..... 1 20
.....AAAAAGTCAACGGTGTCAAC..... 3 21
.....AAAAAGTCAACGGTGTCAACA..... 5 22
.....AAAAAGTCAACGGTGTCAACAT..... 7 23
.....AAAAAGTCAACGGTGTCAACATT..... 120 24
.....AAAAAGTCAACGGTGTCAAC..... 1 20
.....AAAAAGTCAACGGTGTCAACA..... 4 21
.....AAAAAGTCAACGGTGTCAACAT..... 4 23
.....AAAAAGTCAACGGTGTCAACATT..... 22 24
.....AAAAAGTCAACGGTGTCAAC..... 1 18
.....AAAGTCAACGGTGTCAAC..... 2 19
.....AAAGTCAACGGTGTCAACA..... 2 20
.....AAAGTCAACGGTGTCAACAT..... 8 21
.....AAAGTCAACGGTGTCAACATT..... 4 22
.....AAAGTCAACGGTGTCAACATTT..... 14 23
.....AAAGTCAACGGTGTCAACATTTA..... 2 24
.....AAGTCAACGGTGTCAACAT..... 3 20
.....AAGTCAACGGTGTCAACATT..... 8 21
.....AAGTCAACGGTGTCAACATTT..... 1 22
.....AGTCAACGGTGTCAACATTTA..... 1 24
.....GTCAACGGTGTCAACATTTA..... 1 21
.....GTCAACGGTGTCAACATTTA..... 1 23
.....TCAACGGTGTCAACATTTAG..... 1 21
.....ACGGTGTCAACATTTAGAAACGG..... 6 24
.....GGTGTCAACATTTAGAAACGG..... 1 22
.....GGTGTCAACATTTAGAAACGGA..... 6 23
.....GGTGTCAACATTTAGAAACGGAG..... 20 24
.....GTGTCAACATTTAGAAACGGAG..... 4 24
.....TGTCACATTTAGAAACGGA..... 3 21
.....TGTCACATTTAGAAACGGAGG..... 2 24
.....GTCAACATTTAGAAACGGAGGA..... 2 24
.....CAACATTTAGAAACGGAGGAGT..... 1 24
.....AAACATTTAGAAACGGAGGA..... 1 21
.....AAACATTTAGAAACGGAGGAGT..... 1 23
.....ATTAGAAACGGAGGAG..... 1 18

```

```

>osa-miR807c_MIMAT0004035_Oryza_sativa_miR807c
TTACAAGCCATCGCACAAATCAATAGGATGACAGTCTCATATAGGTGGAACCAACCGTCTCTCACAGGTGAATCATTGATAGTGGTTTTGTCAAATTAACACTCAAAAATATATGACTTGAGTGCCA
*****CTCACTCAACAGGTGAATC*****
.....ACAAAATCAATAGGATGCCAGTC..... 1 24
.....ATCATAGGTGGAACCAACCGTCT..... 1 23
.....TCATAGGTGGAACCAACCGTCTAT..... 1 24
.....TGGAAACCAACCGTCTCTCAC..... 1 22
.....AATCATTGATAGTGGTT..... 1 24

```

```

>osa-miR808_MIMAT0004036_Oryza_sativa_miR808
ATTCATATTGATGTTAATGAATCTAGATAGATATATATGCTAGATTCTTAACATCAATGAATGTTGGAAATGAAGAAGTACTTACATTTGAAATGGAGGAGTACAAAGTATTCTGTATTACTGAGGTGACGAG
*****ATGAATGTTGGAAATGAAGAA*****
.....ATATTGATGTTAATGAATCTA..... 4 21
.....ATATTGATGTTAATGAATCTAGA..... 7 23
.....ATTGATGTTAATGAATCTAGATA..... 1 23
.....TGATGTTAATGAATCTAGATAGAT..... 1 24
.....ATGTTAATGAATCTAGATAGATAT..... 2 24
.....ATATATATGCTAGATTCATT..... 2 21
.....ATATATATGCTAGATTCATTAA..... 2 23
.....ATATATATGCTAGATTCATTAAAC..... 6 24
.....ATATATATGCTAGATTCATTAAACA..... 1 25
.....ATATATGCTAGATTCATTAA..... 1 21
.....ATATATGCTAGATTCATTAAAC..... 1 22
.....ATATATGCTAGATTCATTAAACAT..... 2 24
.....ATATGCTAGATTCATTAAACATC..... 2 23
.....ATATGCTAGATTCATTAAACATCA..... 5 24
.....TATGCTAGATTCATTAAACA..... 1 20
.....TATGCTAGATTCATTAAACATCA..... 2 23
.....TATGCTAGATTCATTAAACATCAA..... 2 24
.....TAGATTCATTAAACATCAATGAA..... 1 24
.....AGATTCATTAAACATCAATGAAT..... 7 24
.....ATTCATTAAACATCAATGAA..... 2 21
.....CATTAAACATCAATGAATGTTGG..... 2 24
.....ATTAACATCAATGAATGTTGGGA..... 1 24
.....AACATCAATGAATGTTGGGA..... 5 21
.....AACATCAATGAATGTTGGGAAT..... 1 24
.....ACATCAATGAATGTTGGGA..... 1 20
.....ACATCAATGAATGTTGGGA..... 9 21
.....CATCAATGAATGTTGGGA..... 3 20
.....CATCAATGAATGTTGGGAAT..... 1 21
.....CATCAATGAATGTTGGGAAT..... 1 22
.....ATCAATGAATGTTGGGA..... 3 19
.....ATCAATGAATGTTGGGA..... 6 20
.....ATCAATGAATGTTGGGAAT..... 11 21
.....ATCAATGAATGTTGGGAATG..... 92 22
.....TCAATGAATGTTGGGA..... 1 18
.....TCAATGAATGTTGGGAAT..... 2 20
.....TCAATGAATGTTGGGAATG..... 2 21
.....AATGAATGTTGGGAATG..... 2 19

```



```

.....ATATGAATGTGGAAATGT..... 1 19
.....AGAACTGACTTACATTGTGAA... 3 20
.....AATGACTTACATTGTGAAA..... 1 19

```

```

>osa-miR809a_MIMAT0004037_Oryza_sativa_miR809a
CATATTGAGGTTAATGAATCTATATAGATATATATGTCTAGATTCAATTAACATCAATGAATGTGAGAAATGTTAGAACTGACTTACATTGTGAAATGGAGGAGTAACAAAACCTCTGTATCAGGCAAAATCCCACT
*****TGAATGTGAGAAATGTTAGAAAT***** 22
.....ATATATATATGTCTAGATTCAATTA..... 2 24
.....ATATATATGTCTAGATTCAATTA..... 2 21
.....ATATATATGTCTAGATTCAATTA..... 2 23
.....ATATATATGTCTAGATTCAATTAAC..... 6 24
.....ATATATATGTCTAGATTCAATTAACA..... 1 25
.....ATATATGTCTAGATTCAATTA..... 1 21
.....ATATGTCTAGATTCAATTAAC..... 1 22
.....ATATATGTCTAGATTCAATTAACAT..... 2 24
.....ATATGTCTAGATTCAATTAACATC..... 2 23
.....ATATGTCTAGATTCAATTAACATCA..... 5 24
.....TATGTCTAGATTCAATTAACA..... 1 20
.....TATGTCTAGATTCAATTAACATCA..... 2 23
.....TATGTCTAGATTCAATTAACATCAA..... 2 24
.....TAGATTCAATTAACATCAATGAAT..... 1 24
.....AGATTCAATTAACATCAATGAAT..... 7 24
.....ATTCAATTAACATCAATGAAT..... 2 21
.....CATTAAACATCAATGAATGTGAG..... 1 24
.....ATCAATATGAATGTGAGAAAT..... 1 21
.....TCAATATGAATGTGAGAA..... 1 18
.....ATATGAATGTGAGAAATGTTAGAA..... 1 24
.....AATGTGAGAAATGTTAGAAATGACT..... 1 24
.....TGTGAGAAATGTTAGAAATGACTTA..... 1 24
.....TGAGAAATGTTAGAAATGACT..... 1 20
.....TGAGAAATGTTAGAAATGACTTAC..... 1 23
.....GAGAAATGTTAGAAATGACTTACAT..... 1 24
.....AGAAATGTTAGAAATGACTTACA..... 3 22
.....AGAAATGTTAGAAATGACTTACAT..... 1 23
.....AGAAATGTTAGAAATGACTTACATT..... 1 24
.....AATGTGAGAAATGACTTACAT..... 3 21
.....AAATGTGAGAAATGACTTACATT..... 1 22
.....AAATGTGAGAAATGACTTACATTG..... 1 23
.....AAATGTGAGAAATGACTTACATTGT..... 1 24
.....AATGTGAGAAATGACTTACATTG..... 1 22
.....ATGTTAGAAATGACTTACATTGTG..... 3 23
.....ATGTTAGAAATGACTTACATTGTGA..... 6 24
.....TTAGAAATGACTTACATTGTGA..... 2 21
.....TTAGAAATGACTTACATTGTGAA..... 1 22
.....TAGAAATGACTTACATTGTGAA..... 25 21
.....TAGAAATGACTTACATTGTGAA..... 3 22
.....AGAAATGACTTACATTGTGAA..... 3 20
.....AATGACTTACATTGTGAA..... 1 19
.....AACAAAACCTCTGTATCAGGCAA..... 1 24
.....AAAACCTCTGTATCAGGCAAAAC..... 1 24

```

```

>osa-miR809b_MIMAT0004038_Oryza_sativa_miR809b
TTCTAGCATTTCCACATTTCATATTGATGTTAATGAATCTAGATTGATTACATCAATGAATGTGAGAAATGTTAGAACTGACTTACATTGTGAAACGGAGGAGTAGTTGCAATATTAAGCCTACATGGGAGTGAATT
*****TGAATGTGAGAAATGTTAGAAAT***** 22
.....CTAGCATTTCCACATTTCATA..... 1 21
.....AGCATTTCCACATTTCATATTGAT..... 3 24
.....GCATTTCCACATTTCATATTGATG..... 1 24
.....ATTTCACATTTCATATTGAT..... 1 21
.....ATATTGATGTTAATGAATCTA..... 4 21
.....ATATTGATGTTAATGAATCTAGA..... 7 23
.....ATCAATATGAATGTGAGAAAT..... 1 21
.....TCAATATGAATGTGAGAA..... 1 18
.....ATATGAATGTGAGAAATGTTAGAA..... 1 24
.....AATGTGAGAAATGTTAGAAATGACT..... 1 24
.....TGTGAGAAATGTTAGAAATGACTTA..... 1 24
.....TGAGAAATGTTAGAAATGACT..... 1 20
.....GAGAAATGTTAGAAATGACTTAC..... 1 23
.....GAGAAATGTTAGAAATGACTTACAT..... 1 24
.....AGAAATGTTAGAAATGACTTACA..... 3 22
.....AGAAATGTTAGAAATGACTTACAT..... 1 23
.....AGAAATGTTAGAAATGACTTACATT..... 1 24
.....AAATGTGAGAAATGACTTACAT..... 3 21
.....AAATGTGAGAAATGACTTACATT..... 1 22
.....AAATGTGAGAAATGACTTACATTG..... 1 23
.....AAATGTGAGAAATGACTTACATTGT..... 1 24
.....AATGTGAGAAATGACTTACATTG..... 1 22
.....ATGTTAGAAATGACTTACATTGTG..... 3 23
.....ATGTTAGAAATGACTTACATTGTGA..... 6 24
.....TTAGAAATGACTTACATTGTGA..... 2 21
.....TTAGAAATGACTTACATTGTGAA..... 1 22
.....TAGAAATGACTTACATTGTGAA..... 25 21
.....TAGAAATGACTTACATTGTGAA..... 3 22
.....TAGAAATGACTTACATTGTGAAAC..... 1 23
.....TAGAAATGACTTACATTGTGAAACG..... 2 24
.....AGAATGACTTACATTGTGAA..... 3 20
.....AGAATGACTTACATTGTGAAAC..... 1 22
.....AGAATGACTTACATTGTGAAACG..... 2 23
.....AGAATGACTTACATTGTGAAACGG..... 142 24
.....AGAATGACTTACATTGTGAAACGGA..... 1 25
.....GAATGACTTACATTGTGAAACGG..... 7 23
.....GAATGACTTACATTGTGAAACGGA..... 59 24
.....AATGACTTACATTGTGAAAC..... 1 19
.....AATGACTTACATTGTGAAACG..... 2 21
.....AATGACTTACATTGTGAAACGG..... 8 22
.....AATGACTTACATTGTGAAACGGA..... 30 23
.....AATGACTTACATTGTGAAACGGAG..... 35 24
.....ATGACTTACATTGTGAAACGG..... 35 21
.....ATGACTTACATTGTGAAACGGA..... 42 22
.....ATGACTTACATTGTGAAACGGAG..... 34 23
.....ATGACTTACATTGTGAAACGGAGG..... 16 24
.....TGACTTACATTGTGAAACGG..... 7 20
.....TGACTTACATTGTGAAACGGA..... 119 21
.....TGACTTACATTGTGAAACGGAG..... 9 22
.....TGACTTACATTGTGAAACGGAGG..... 18 23
.....TGACTTACATTGTGAAACGGAGGG..... 4 24
.....GACTTACATTGTGAAACGG..... 1 19
.....GACTTACATTGTGAAACGGA..... 6 20
.....GACTTACATTGTGAAACGGAG..... 2 21
.....GACTTACATTGTGAAACGGAGG..... 11 23
.....GACTTACATTGTGAAACGGAGGG..... 35 24

```

```

.....ACTTACATTGTGAACGGAG..... 4 20
.....ACTTACATTGTGAACGGAGG..... 18 21
.....ACTTACATTGTGAACGGAGGG..... 11 22
.....ACTTACATTGTGAACGGAGGGAG..... 4 24
.....CTTACATTGTGAACGGAGGGAG..... 1 23
.....CTTACATTGTGAACGGAGGGAGT..... 1 24
.....TTACATTGTGAACGGAGG..... 1 19
.....TTACATTGTGAACGGAGGG..... 3 20
.....TTACATTGTGAACGGAGGGA..... 1 21
.....TTACATTGTGAACGGAGGGAG..... 1 22
.....TTACATTGTGAACGGAGGGAGT..... 1 23
.....TACATTGTGAACGGAGGAG..... 2 21
.....TACATTGTGAACGGAGGAGTA..... 2 23
.....ACATTGTGAACGGAGG..... 1 18
.....ACATTGTGAACGGAGGGAGT..... 3 21
.....TTGTGAACGGAGGGAGT..... 1 18
.....TTGTGAACGGAGGGAGTGT..... 1 22
.....TGTGAACGGAGGGAGTA..... 1 18
.....TGTGAACGGAGGGAGTAG..... 1 19

```

>osa-miR809c_MIMAT0004039_Oryza_sativa_miR809c

```

ATTCATATTAATTAATGAATCTAGATATATATTTATATAAAATCATTAAACATCAATGAATGTGAGAAATGTTAGAATGACTTACATTGTGAAATGGAGGAAGTATAAGAACTAGGACTGGATGAGAGCTTACTAG
*****TGAATGTGAGAAATGTTAGAAT*****
.....ATTAATGAATCTAGATATATATAT..... 1 24
.....AATGTGAGAAATGTTAGAATGACT..... 1 24
.....TGTGAGAAATGTTAGAATGACTTA..... 1 24
.....TGAGAAATGTTAGAATGACT..... 1 20
.....TGAGAAATGTTAGAATGACTTAC..... 1 23
.....GAGAAATGTTAGAATGACTTACAT..... 1 24
.....AGAAATGTTAGAATGACTTACA..... 3 22
.....AGAAATGTTAGAATGACTTACAT..... 1 23
.....AGAAATGTTAGAATGACTTACATT..... 1 24
.....AAATGTTAGAATGACTTACAT..... 3 21
.....AAATGTTAGAATGACTTACATT..... 1 22
.....AAATGTTAGAATGACTTACATTG..... 1 23
.....AAATGTTAGAATGACTTACATTGT..... 1 24
.....AATGTTAGAATGACTTACATTG..... 1 22
.....ATGTTAGAATGACTTACATTG..... 3 23
.....ATGTTAGAATGACTTACATTGGA..... 6 24
.....TTAGAATGACTTACATTGTGA..... 2 21
.....TTAGAATGACTTACATTGTGAA..... 1 22
.....TAGAATGACTTACATTGTGAA..... 25 21
.....TAGAATGACTTACATTGTGAAA..... 3 22
.....AGAATGACTTACATTGTGAA..... 3 20
.....AATGACTTACATTGTGAAA..... 1 19
.....GACTTACATTGTGAAATGGAGGAA..... 1 24
.....AAGAACTAGGACTGGATGAGAGC..... 2 24
.....AGGACTGGATGAGAGCTTACTAG..... 3 24

```

>osa-miR809d_MIMAT0004040_Oryza_sativa_miR809d

```

TTTCATATTGATGTTAATGAATCTAGACATAGTTATCTATCTAGATTCATTAAACATCAATGAATGTGAGAAATGTTAGAATGACTTACATTGTGAAACGGAGGAAGTAAAGTAGTTGCTGGATGTTTGTGTTATTC
*****TGAATGTGAGAAATGTTAGAAT*****
.....ATATTGATGTTAATGAATCTA..... 4 21
.....ATATTGATGTTAATGAATCTAGA..... 7 23
.....ATATTGATGTTAATGAATCTAGAC..... 7 24
.....ATATTGATGTTAATGAATCTAGACA..... 1 25
.....ATTGATGTTAATGAATCTAGACA..... 7 23
.....ATTGATGTTAATGAATCTAGACAT..... 7 24
.....TTGATGTTAATGAATCTAGAC..... 1 21
.....TGATGTTAATGAATCTAGACATA..... 2 23
.....ATGTTAATGAATCTAGACAT..... 1 20
.....ATGTTAATGAATCTAGACATA..... 2 21
.....ATGTTAATGAATCTAGACATAG..... 1 22
.....TGTTAATGAATCTAGACATA..... 1 20
.....TCTACTAGATTCATTAAACAT..... 1 21
.....TATCTAGATTCATTAAACATCAAT..... 1 23
.....TAGATTCATTAAACATCAATGAA..... 1 24
.....AGATTCATTAAACATCAATGAA..... 7 24
.....ATTCATTAAACATCAATGAA..... 2 21
.....CATTAAACATCAATGAATGTGAG..... 1 24
.....ATCAATGAATGTGAGAAAT..... 1 21
.....TCAATGAATGTGAGAA..... 1 18
.....ATATGAATGTGAGAAATGTTAGAA..... 1 24
.....AATGTGAGAAATGTTAGAATGACT..... 1 24
.....TGTGAGAAATGTTAGAATGACTTA..... 1 24
.....TGAGAAATGTTAGAATGACT..... 1 20
.....TGAGAAATGTTAGAATGACTTAC..... 1 23
.....GAGAAATGTTAGAATGACTTACAT..... 1 24
.....AGAAATGTTAGAATGACTTACA..... 3 22
.....AGAAATGTTAGAATGACTTACAT..... 1 23
.....AGAAATGTTAGAATGACTTACATT..... 1 24
.....AAATGTTAGAATGACTTACAT..... 3 21
.....AAATGTTAGAATGACTTACATT..... 1 22
.....AAATGTTAGAATGACTTACATTG..... 1 23
.....AAATGTTAGAATGACTTACATTGT..... 1 24
.....AATGTTAGAATGACTTACATTG..... 1 22
.....ATGTTAGAATGACTTACATTG..... 3 23
.....ATGTTAGAATGACTTACATTGGA..... 6 24
.....TTAGAATGACTTACATTGTGA..... 2 21
.....TTAGAATGACTTACATTGTGAA..... 1 22
.....TAGAATGACTTACATTGTGAA..... 25 21
.....TAGAATGACTTACATTGTGAAA..... 3 22
.....TAGAATGACTTACATTGTGAAAC..... 1 23
.....TAGAATGACTTACATTGTGAAACG..... 2 24
.....AGAATGACTTACATTGTGAA..... 3 20
.....AGAATGACTTACATTGTGAAAC..... 1 22
.....AGAATGACTTACATTGTGAAACG..... 2 23
.....AGAATGACTTACATTGTGAAACGG..... 142 24
.....AGAATGACTTACATTGTGAAACGGA..... 1 25
.....GAATGACTTACATTGTGAAACGG..... 7 23
.....GAATGACTTACATTGTGAAACGGA..... 59 24
.....AATGACTTACATTGTGAAA..... 1 19
.....AATGACTTACATTGTGAAACG..... 2 21
.....AATGACTTACATTGTGAAACGG..... 8 22
.....AATGACTTACATTGTGAAACGGA..... 30 23
.....AATGACTTACATTGTGAAACGGAG..... 35 24
.....ATGACTTACATTGTGAAACGG..... 35 21
.....ATGACTTACATTGTGAAACGGA..... 42 22
.....ATGACTTACATTGTGAAACGGAG..... 34 23
.....ATGACTTACATTGTGAAACGGAGG..... 16 24

```

```

.....TGACTTACATTGTGAACGGG..... 7 20
.....TGACTTACATTGTGAACCGGA..... 119 21
.....TGACTTACATTGTGAACCGGAG..... 9 22
.....TGACTTACATTGTGAACCGGAGG..... 18 23
.....TGACTTACATTGTGAACCGGAGGA..... 54 24
.....TGACTTACATTGTGAACCGGAGAA..... 1 25
.....GACTTACATTGTGAACCGG..... 1 19
.....GACTTACATTGTGAACCGGA..... 6 20
.....GACTTACATTGTGAACCGGAG..... 2 21
.....GACTTACATTGTGAACCGGAGGA..... 33 23
.....GACTTACATTGTGAACCGGAGAA..... 91 24
.....ACTTACATTGTGAACCGGAG..... 4 20
.....ACTTACATTGTGAACCGGAGG..... 18 21
.....ACTTACATTGTGAACCGGAGGA..... 8 22
.....ACTTACATTGTGAACCGGAGGA..... 2 23
.....ACTTACATTGTGAACCGGAGGAAG..... 7 24
.....CTTACATTGTGAACCGGAGGA..... 1 21
.....CTTACATTGTGAACCGGAGGA..... 2 22
.....TTACATTGTGAACCGGAGG..... 1 19
.....TTACATTGTGAACCGGAGGA..... 4 20
.....TTACATTGTGAACCGGAGGA..... 12 21
.....TTACATTGTGAACCGGAGGAAG..... 2 22
.....TTACATTGTGAACCGGAGGAAGT..... 3 23
.....TTACATTGTGAACCGGAGGAAGTA..... 1 24
.....TACATTGTGAACCGGAGGA..... 2 19
.....TACATTGTGAACCGGAGGA..... 4 20
.....TACATTGTGAACCGGAGGAAG..... 11 21
.....TACATTGTGAACCGGAGGAAGT..... 1 22
.....TACATTGTGAACCGGAGGAAGTA..... 2 23
.....ACATTGTGAACCGGAGGA..... 1 18
.....ACATTGTGAACCGGAGGA..... 1 19
.....ACATTGTGAACCGGAGGAAG..... 1 20
.....ACATTGTGAACCGGAGGAAGT..... 7 21
.....ACATTGTGAACCGGAGGAAGTA..... 3 22
.....CATTGTGAACCGGAGGAAGT..... 1 20
.....CATTGTGAACCGGAGGAAGTA..... 1 21

```

```

>osa-miR809e_MIMAT0004041_Oryza_sativa_miR809e
TAATGTTAATGAATCTAGACATCTAACATCAATATGCTAGATTATTAACATCAATATGAATGTGAGAAATGTTAGAATGTTACATTGTGAACCGGATGAAGTAGTATTGTTGTTACGTTAAATAAACACAGA
*****TGAATGTGAGAAATGTTAGAAT***** osa-miR809e 22
.AATGTTAATGAATCTAGACA..... 1 20
.AATGTTAATGAATCTAGACAT..... 1 20
.....ATATGCTAGATTATTAACATCA..... 4 24
.....ATCAATATGAATGTGAGAAAT..... 1 21
.....TCAATATGAATGTGAGAA..... 1 18
.....ATATGAATGTGAGAAATGTTAGAA..... 1 24
.....TAGAATAACTTACATTGTGAA..... 1 21
.....AGAATAACTTACATTGTGAACGG..... 23 24
.....GAATAACTTACATTGTGAACCGG..... 2 23
.....GAATAACTTACATTGTGAACCGGA..... 19 24
.....AATAACTTACATTGTGAACCGGA..... 3 23
.....AATAACTTACATTGTGAACCGGAT..... 2 24
.....ATAACTTACATTGTGAACCGGAT..... 1 23
.....AACTTACATTGTGAACCGGAT..... 1 21
.....AACTTACATTGTGAACCGGATGAA..... 1 24
.....CTTACATTGTGAACCGGATGAAGT..... 1 24
.....TTACATTGTGAACCGGATGAA..... 2 21
.....TTACATTGTGAACCGGATGAAG..... 1 22
.....TACATTGTGAACCGGATGAAGT..... 1 22
.....ACATTGTGAACCGGATGAAGTA..... 1 22

```

```

>osa-miR809f_MIMAT0004042_Oryza_sativa_miR809f
TTCAATATGTTAATGAATCTAGACATATATCTATCTAATCTAACATCAATATGAATGTGAGAAATGTTAGAATGTTAAATTTGGAACCGGAGGAATATTAATGTCGTAATCTAATTGAAGAGCCCTC
*****TGAATGTGAGAAATGTTAGAAT***** osa-miR809f 22
...ATATTAATGTTAATGAATCTAGAC..... 2 24
...ATTAATGTTAATGAATCTAGACAT..... 1 24
...TAATGTTAATGAATCTAGACATAT..... 1 24
...AATGTTAATGAATCTAGACA..... 1 20
...AATGTTAATGAATCTAGACATA..... 2 22
...AATGTTAATGAATCTAGACATATA..... 4 24
...ATGTTAATGAATCTAGACAT..... 1 20
...ATGTTAATGAATCTAGACATA..... 2 21
...ATGTTAATGAATCTAGACATAT..... 2 22
...ATGTTAATGAATCTAGACATATA..... 11 23
...ATGTTAATGAATCTAGACATATAT..... 2 24
...TGTTAATGAATCTAGACATA..... 1 20
...ATGAATCTAGACATATATCTATCT..... 1 25
...GAATCTAGACATATATCTATCT..... 1 24
.....ATCAATATGAATGTGAGAAAT..... 1 21
.....TCAATATGAATGTGAGAA..... 1 18
.....ATATGAATGTGAGAAATGTTAGAA..... 1 24
.....TTAAATTTGGAACCGGAGGAAG..... 1 22
.....TTGTGAACCGGAGGAAGTAT..... 2 20
.....TTGTGAACCGGAGGAAGTATT..... 1 21
.....TGAACCGGAGGAAGTATTA..... 1 19

```

```

>osa-miR809g_MIMAT0004043_Oryza_sativa_miR809g
TTCATATTGATGTAATGAATATATAAATATATATGCTAGATTCAATAGCATCAATATGAATGTGAGAAATGTTAGAATGACTTACATTGTGAACCGGAGGATATATAAATAGCTGAGATGCATGCATGATCGCTTG
*****TGAATGTGAGAAATGTTAGAAT***** osa-miR809g 22
.....ATATATGCTAGATTCAAT..... 2 21
.....ATATGCTAGATTCAATAGCA..... 1 23
.....ATATGCTAGATTCAATAGCATC..... 1 23
.....TATGCTAGATTCAATAGCATCAA..... 1 24
.....AGATTCATAGCATCAATATGAAT..... 3 24
.....ATTCATAGCATCAATATGAA..... 1 21
.....ATCAATATGAATGTGAGAAAT..... 1 21
.....TCAATATGAATGTGAGAA..... 1 18
.....ATATGAATGTGAGAAATGTTAGAA..... 1 24
.....AATGTGAGAAATGTTAGAATGACT..... 1 24
.....TGTGAGAAATGTTAGAATGACTTA..... 1 24
.....TGAGAAATGTTAGAATGACT..... 1 20
.....TGAGAAATGTTAGAATGACTTAC..... 1 23
.....GAGAAATGTTAGAATGACTTACAT..... 1 24
.....AGAATGTTAGAATGACTTACA..... 3 22
.....AGAATGTTAGAATGACTTACAT..... 1 23
.....AGAATGTTAGAATGACTTACATT..... 1 24
.....AAATGTTAGAATGACTTACAT..... 3 21
.....AAATGTTAGAATGACTTACATT..... 1 22
.....AAATGTTAGAATGACTTACATTG..... 1 23

```

```

.....AAATGTAGAATGACTTACATTG..... 1 24
.....AATGTAGAATGACTTACATTG..... 1 22
.....ATGTAGAATGACTTACATTGG..... 3 23
.....ATGTAGAATGACTTACATTGTGA..... 6 24
.....TTAGAATGACTTACATTGTGA..... 2 21
.....TTAGAATGACTTACATTGTGAA..... 1 22
.....TAGAATGACTTACATTGTGAA..... 25 21
.....TAGAATGACTTACATTGTGAAA..... 3 22
.....TAGAATGACTTACATTGTGAAAC..... 1 23
.....TAGAATGACTTACATTGTGAAACG..... 2 24
.....AGAATGACTTACATTGTGAA..... 3 20
.....AGAATGACTTACATTGTGAAAC..... 1 22
.....AGAATGACTTACATTGTGAAACG..... 2 23
.....AGAATGACTTACATTGTGAAACGG..... 142 24
.....AGAATGACTTACATTGTGAAACCGA..... 1 25
.....GAATGACTTACATTGTGAAACGG..... 7 23
.....GAATGACTTACATTGTGAAACCGA..... 59 24
.....AATGACTTACATTGTGAAA..... 1 19
.....AATGACTTACATTGTGAAACG..... 2 21
.....AATGACTTACATTGTGAAACGG..... 8 22
.....AATGACTTACATTGTGAAACCGA..... 30 23
.....AATGACTTACATTGTGAAACGGAG..... 35 24
.....ATGACTTACATTGTGAAACGG..... 35 21
.....ATGACTTACATTGTGAAACCGA..... 42 22
.....ATGACTTACATTGTGAAACGGAG..... 34 23
.....ATGACTTACATTGTGAAACGGAGG..... 16 24
.....TGACTTACATTGTGAAACGG..... 7 20
.....TGACTTACATTGTGAAACCGA..... 119 21
.....TGACTTACATTGTGAAACGGAG..... 9 22
.....TGACTTACATTGTGAAACGGAGG..... 18 23
.....TGACTTACATTGTGAAACGGAGGG..... 4 24
.....GACTTACATTGTGAAACGG..... 1 19
.....GACTTACATTGTGAAACCGA..... 6 20
.....GACTTACATTGTGAAACGGAG..... 2 21
.....GACTTACATTGTGAAACGGAGG..... 11 23
.....GACTTACATTGTGAAACGGAGGA..... 35 24
.....ACTTACATTGTGAAACGGAG..... 4 20
.....ACTTACATTGTGAAACGGAGG..... 18 21
.....ACTTACATTGTGAAACGGAGGG..... 11 22
.....ACTTACATTGTGAAACGGAGGGAG..... 4 24
.....CTTACATTGTGAAACGGAGGGAG..... 1 23
.....CTTACATTGTGAAACGGAGGGAGT..... 1 24
.....TTACATTGTGAAACGGAGG..... 1 19
.....TTACATTGTGAAACGGAGGG..... 3 20
.....TTACATTGTGAAACGGAGGGA..... 1 21
.....TTACATTGTGAAACGGAGGAG..... 1 22
.....TTACATTGTGAAACGGAGGAGT..... 1 23
.....TACATTGTGAAACGGAGGAG..... 2 21
.....TACATTGTGAAACGGAGGAGTA..... 2 23
.....ACATTGTGAAACGGAGGG..... 1 18
.....ACATTGTGAAACGGAGGGAGT..... 3 21
.....ATTGTGAAACGGAGGGAGTAT..... 1 21
.....TTGTGAAACGGAGGGAGT..... 1 18
.....TTGTGAAACGGAGGGAGTATA..... 1 21
.....TGTGAAACGGAGGGAGTA..... 1 18
.....TGTGAAACGGAGGGAGTATA..... 1 20

```

```

>osa-miR809h_MIMAT0004044_Oryza_sativa_miR809h
TTCAATTTGATGTTAATGAATCTAGACATATATCTATTTAGATTCAATAAATCAATATGAATGTGAGAAATGTTAGAATAACTTACATTGTGAAACGGAGAAGTCTGTTGAAGTAGTTATCATATATAAAATCAGAA
*****TTGAATGTGAGAAATGTTAGAAT*****
.....ATATTGATGTTAATGAATCTA..... 7 21
.....ATATTGATGTTAATGAATCTAGA..... 7 23
.....ATATTGATGTTAATGAATCTAGAC..... 7 24
.....ATATTGATGTTAATGAATCTAGACA..... 1 25
.....ATTGATGTTAATGAATCTAGACA..... 7 23
.....ATTGATGTTAATGAATCTAGACAT..... 7 24
.....TTGATGTTAATGAATCTAGAC..... 1 21
.....TGATGTTAATGAATCTAGACATA..... 2 23
.....GATGTTAATGAATCTAGACATATAT..... 1 25
.....ATGTTAATGAATCTAGACAT..... 1 20
.....ATGTTAATGAATCTAGACATA..... 2 21
.....ATGTTAATGAATCTAGACATAT..... 2 22
.....ATGTTAATGAATCTAGACATATA..... 11 23
.....ATGTTAATGAATCTAGACATATAT..... 2 24
.....TGTTAATGAATCTAGACATA..... 1 20
.....ACATATATATCTATTTAGATTCA..... 1 23
.....ATATATATCTATTTAGATTCA..... 1 21
.....ATATATATCTATTTAGATTCATTA..... 1 24
.....ATCAATATGAATGTGAGAAAT..... 1 21
.....TCAATATGAATGTGAGAA..... 1 18
.....ATATGAATGTGAGAAATGTTAGAA..... 1 24
.....TAGAATAACTTACATTGTGAA..... 1 21
.....AGAATAACTTACATTGTGAAACGG..... 23 24
.....GAATAACTTACATTGTGAAACGG..... 2 23
.....GAATAACTTACATTGTGAAACCGA..... 19 24
.....AATAACTTACATTGTGAAACGGAG..... 3 23
.....AATAACTTACATTGTGAAACGGAG..... 2 24
.....TAACCTTACATTGTGAAACGGAG..... 1 22
.....AUCTTACATTGTGAAACGGAG..... 1 21
.....ACTTACATTGTGAAACGGAG..... 4 20
.....ACTTACATTGTGAAACGGAGA..... 2 21
.....TTACATTGTGAAACGGAGAA..... 2 20

```

```

>osa-miR811a_MIMAT0004046_Oryza_sativa_miR811a
CCTCACAACTAGGAAAAATGTAGTGCAATACACATATGTAGTGGAACTTAAAACTTACCGTTAGATCGAGAAATGGAGTCCGAGATTGTTACGTCATCATGAGTTAAAAATTAACCTCGCAGATTCACTCATGAGTTG
*****ACCGTTAGATCGAGAAATGGAGCT*****
.....AAAACACCGTTAGATCGAGA..... 1 21
.....AAAACACCGTTAGATCGAGAA..... 1 21
.....AAAACACCGTTAGATCGAGAAA..... 1 22
.....AAAACACCGTTAGATCGAGAAATG..... 1 24
.....AACTACCGTTAGATCGAGAAATGG..... 1 24
.....ACTACCGTTAGATCGAGAAATGGA..... 3 24
.....CTACCGTTAGATCGAGAAATGGA..... 2 23
.....CTACCGTTAGATCGAGAAATGGAC..... 6 24
.....TACCGTTAGATCGAGAAATGGA..... 2 22
.....TACCGTTAGATCGAGAAATGGAC..... 1 23
.....TACCGTTAGATCGAGAAATGGAGG..... 1 24
.....CCGTTAGATCGAGAAATGGAGTCC..... 1 24
.....GTTAGATCGAGAAATGGAGTCC..... 1 23
.....GTTAGATCGAGAAATGGAGTCCG..... 6 24

```

```

.....ATCGAGAAATGGAGCTCCGA..... 1 20
.....ATCGAGAAATGGAGCTCCGAG..... 6 21
.....TCGAGAAATGGAGCTCCGAGA..... 1 21
.....CGAGAAATGGAGCTCCGAGAT..... 1 21
.....GAGAAATGGAGCTCCGAGATTCGT..... 1 24
.....GTTAAAAATTAAGCTCGAGATTCA..... 1 24
.....TTAAAAATTAAGCTCGAGATT..... 1 21
.....TTAAAAATTAAGCTCGAGATT..... 1 22
.....TTAAAAATTAAGCTCGAGATTCA..... 1 24
.....TTAAAAATTAAGCTCGAGATTCACT..... 1 25
.....TAAAAATTAAGCTCGAGATTCA..... 1 23
.....AAAAATTAAGCTCGAGATTCACTCA..... 1 24
.....AAATTAAGCTCGAGATTCACTCAT..... 1 24
.....AAATTAAGCTCGAGATTCACTCATG..... 1 25
.....ATTAAGCTCGAGATTCACTCATG..... 5 24
.....TTTAAGCTCGAGATTCACTCATG..... 1 23
.....TAACTCGAGATTCACTCATG..... 1 22

```

```

>osa-miR811b_MIMAT0004047_Oryza_sativa_miR811b
GGAGATTACAGGAAAAATGTAGTGAAAAACACATATGTAGTGGAAACTGAAAACTACCGTTAGATCGAGAAATGGAGCTCCGAGATTCGCTCACGTACCATGAGTAAAAATTAAGCTCGAGATTCACTCCTGAGTTA
*****ACCGTTAGATCGAGAAATGGAGCT*****
.....AAAACACCGTTAGATCGAGA..... 1 21
.....AAAACACCGTTAGATCGAGAA..... 1 21
.....AAAACACCGTTAGATCGAGAAA..... 1 22
.....AAAACACCGTTAGATCGAGAAATG..... 1 24
.....AACTACCGTTAGATCGAGAAATGG..... 1 24
.....ACTACCGTTAGATCGAGAAATGGA..... 3 24
.....CTACCGTTAGATCGAGAAATGGA..... 2 23
.....CTACCGTTAGATCGAGAAATGGAC..... 6 24
.....TACCGTTAGATCGAGAAATGGA..... 2 22
.....TACCGTTAGATCGAGAAATGGAG..... 1 23
.....TACCGTTAGATCGAGAAATGGAGG..... 1 24
.....CCGTTAGATCGAGAAATGGAGCTC..... 1 24
.....GTAGATCGAGAAATGGAGCTCC..... 1 23
.....GTAGATCGAGAAATGGAGCTCCG..... 6 24
.....ATCGAGAAATGGAGCTCCGA..... 1 20
.....ATCGAGAAATGGAGCTCCGAG..... 6 21
.....TCGAGAAATGGAGCTCCGAGA..... 1 21
.....CGAGAAATGGAGCTCCGAGAT..... 1 21
.....GAGAAATGGAGCTCCGAGATTCGT..... 1 24
.....GAGCTCCGAGATTGCTCCAGCTC..... 1 23
.....ACGCTCCGAGATTGCTCCAGCTC..... 1 22
.....ACGCTCCGAGATTGCTCCAGCTCA..... 1 23
.....GCTCCGAGATTGCTCCAGCTCAC..... 1 23
.....TCGAGATTGCTCCAGCTCA..... 1 20
.....TCGAGATTGCTCCAGCTCAC..... 1 21
.....GAGATTGCTCCAGCTCACATGAG..... 1 24
.....GTTAAAAATTAAGCTCGAGATTCA..... 1 24
.....TTAAAAATTAAGCTCGAGATT..... 1 21
.....TTAAAAATTAAGCTCGAGATT..... 1 22
.....TTAAAAATTAAGCTCGAGATTCA..... 1 24
.....TTAAAAATTAAGCTCGAGATTCACT..... 1 25
.....TAAAAATTAAGCTCGAGATTCA..... 1 23

```

osa-miR811b 24

```

>osa-miR812a_MIMAT0004049_Oryza_sativa_miR812a
ATGAATAGTATTTTATGTGTACTAATTTTTTAAAAATTTTCATAAATTTTCAAAATAGACGGACGGTTAAACGTTGGACACGGATTTTCCAGGCTGCACCTTTATTTGAAACGGAGGTGACGAGACTGTGCATCAACC
*****GACGGACGGTTAAACGTTGGAC*****
.....CATAAATTTTCAAAATAGACGG..... 1 23
.....CATAAATTTTCAAAATAGACGGGA..... 7 24
.....ATAAATTTTCAAAATAGACGG..... 1 21
.....ATAAATTTTCAAAATAGACGGGA..... 3 23
.....ATAAATTTTCAAAATAGACGGAC..... 179 24
.....TAAATTTTCAAAATAGACGGGA..... 1 22
.....TAAATTTTCAAAATAGACGGAC..... 6 23
.....TAAATTTTCAAAATAGACGGACG..... 3 24
.....AAATTTTCAAAATAGACGG..... 1 20
.....AAATTTTCAAAATAGACGGGA..... 1 21
.....AAATTTTCAAAATAGACGGAC..... 3 22
.....AAATTTTCAAAATAGACGGACG..... 13 23
.....AAATTTTCAAAATAGACGGACGG..... 572 24
.....AAATTTTCAAAATAGACGGACGGT..... 1 25
.....AAATTTTCAAAATAGACGGACGG..... 1 22
.....AAATTTTCAAAATAGACGGACGG..... 14 23
.....AAATTTTCAAAATAGACGGACGGT..... 78 24
.....ATTTTCAAAATAGACGGACG..... 2 21
.....ATTTTCAAAATAGACGGACGG..... 7 22
.....ATTTTCAAAATAGACGGACGGT..... 6 23
.....ATTTTCAAAATAGACGGACGGTTA..... 28 24
.....ATTTTCAAAATAGACGGACGGTTA..... 7 25
.....TTTTCAAAATAGACGGAC..... 1 19
.....TTTTCAAAATAGACGGACG..... 4 20
.....TTTTCAAAATAGACGGACGG..... 9 21
.....TTTTCAAAATAGACGGACGGT..... 9 22
.....TTTTCAAAATAGACGGACGGTTA..... 36 23
.....TTTTCAAAATAGACGGACGGTTA..... 15 24
.....TTTTCAAAATAGACGGAC..... 1 18
.....TTTTCAAAATAGACGGACGG..... 2 20
.....TTTTCAAAATAGACGGACGGT..... 34 21
.....TTTTCAAAATAGACGGACGGT..... 5 22
.....TTTTCAAAATAGACGGACGGTTA..... 6 23
.....TTTTCAAAATAGACGGACGGTTAA..... 4 24
.....TTTCAAAATAGACGGACG..... 2 18
.....TTTCAAAATAGACGGACGG..... 3 19
.....TTTCAAAATAGACGGACGGT..... 6 20
.....TTTCAAAATAGACGGACGGTTA..... 3 21
.....TTTCAAAATAGACGGACGGTTA..... 4 22
.....TTTCAAAATAGACGGACGGTTAA..... 1 23
.....TTTCAAAATAGACGGACGGTTAA..... 7 24
.....TTCAAAATAGACGGACGG..... 1 18
.....TTCAAAATAGACGGACGGT..... 4 19
.....TTCAAAATAGACGGACGGTTA..... 2 20
.....TTCAAAATAGACGGACGGTTA..... 1 21
.....TTCAAAATAGACGGACGGTTAA..... 1 23
.....TTCAAAATAGACGGACGGTTAAAC..... 8 24
.....TCAAAATAGACGGACGGTTA..... 1 19
.....TCAAAATAGACGGACGGTTA..... 1 20
.....TCAAAATAGACGGACGGTTAA..... 2 21
.....AAATAAGACGGACGGTTAA..... 3 19
.....AAATAAGACGGACGGTTAAAC..... 7 20
.....AAATAAGACGGACGGTTAAAC..... 10 21

```

osa-miR812a 22

.....AAATAAGACGGACGGTTAAACG.....	1	22
.....AAATAAGACGGACGGTTAAACGT.....	1	23
.....AAATAAGACGGACGGTTAAAC.....	3	20
.....ATAAGACGGACGGTTAAAC.....	1	18
.....ATAAGACGGACGGTTAAACGTTGG.....	2	24
.....TAAGACGGACGGTTAAACGT.....	1	20
.....TAAGACGGACGGTTAAACGTTGGA.....	2	24
.....AAGACGGACGGTTAAACGTTGGA.....	2	23
.....AAGACGGACGGTTAAACGTTGGAC.....	8	24
.....AGACGGACGGTTAAACGTTGGA.....	1	22
.....ACGGACGGTTAAACGTTGGACGG.....	1	24
.....GGACGGTTAAACGTTGGACACGGA.....	5	24
.....GACGGTTAAACGTTGGACACG.....	1	21
.....GACGGTTAAACGTTGGACACGG.....	2	22
.....GACGGTTAAACGTTGGACACGGA.....	6	23
.....GACGGTTAAACGTTGGACACGGAT.....	26	24
.....ACGGTTAAACGTTGGACA.....	1	18
.....ACGGTTAAACGTTGGACACG.....	1	20
.....ACGGTTAAACGTTGGACACGG.....	4	21
.....ACGGTTAAACGTTGGACACGGA.....	2	22
.....ACGGTTAAACGTTGGACACGGAT.....	3	23
.....ACGGTTAAACGTTGGACACGGATT.....	4	24
.....CGTTAAACGTTGGACACG.....	1	19
.....CGTTAAACGTTGGACACGGAT.....	2	22
.....CGTTAAACGTTGGACACGGATT.....	1	23
.....GTTAAACGTTGGACACGGA.....	1	20
.....GTTAAACGTTGGACACGGATTTTC.....	2	24
.....TTAAACGTTGGACACGGA.....	1	18
.....TAAACGTTGGACACGGATT.....	1	19
.....TAAACGTTGGACACGGATT.....	1	20
.....TAAACGTTGGACACGGATTTT.....	1	21
.....TAAACGTTGGACACGGATTTTCAC.....	2	24
.....AAACGTTGGACACGGATTTTCACG.....	2	24
.....AACGTTGGACACGGATTTTCACGG.....	7	24
.....ACGTTGGACACGGATTTTCACGG.....	1	23
.....ACGTTGGACACGGATTTTCACGGC.....	1	24
.....TGGACACGGATTTTCACGGCT.....	1	21
.....GACACGGATTTTCACGGCT.....	1	19
.....ACGATTTTCACGGCTGCACTTAT.....	1	24
.....CGATTTTCACGGCTGCACTTAT.....	1	24
.....GGATTTTCACGGCTGCACTTAT.....	1	23
.....GGATTTTCACGGCTGCACTTATTT.....	2	24
.....TTTCACGGCTGCACTTATTT.....	1	21
.....CGGCTGCACTTATTTGAACGGGA.....	1	24
.....GGCTGCACTTATTTGAACGGGAG.....	1	24
.....CGGAGGTAGACAAGACTGTTCAT.....	1	24

>osa-miR812b_MIMAT0004050_Oryza_sativa_miR812b
TATTCTATGTTTATCATCTAATAACAATAAAAACTAATCATTAATAATTTTCAAATAAGACGGACGGTTAAACGTTGGACACGAATACATATAGTCGCACTTATTTGGACGGATGATGATGTTCTATGGGGTCAATT
*****GACGGACGGTTAAACGTTGGAC*****

.....AATAACAATAAAAACTAATCAT.....	2	24
.....AAAAATTTTCAAATAAGAC.....	1	19
.....AAAAATTTTCAAATAAGACGGAC.....	2	23
.....AAAAATTTTCAAATAAGACGGACG.....	229	24
.....AAAAATTTTCAAATAAGACGGACGG.....	6	25
.....AAAAATTTTCAAATAAGACGGACG.....	3	23
.....AAAAATTTTCAAATAAGACGGACGG.....	250	24
.....AAAAATTTTCAAATAAGACGGACGGT.....	2	25
.....AAATTTTCAAATAAGACGGA.....	1	20
.....AAATTTTCAAATAAGACGGAC.....	2	21
.....AAATTTTCAAATAAGACGGACGG.....	2	22
.....AAATTTTCAAATAAGACGGACGG.....	8	23
.....AAATTTTCAAATAAGACGGACGGT.....	56	24
.....AAATTTTCAAATAAGACGGACGGTT.....	2	25
.....AAATTTTCAAATAAGACGGA.....	1	19
.....AATTTTCAAATAAGACGGAC.....	1	20
.....AATTTTCAAATAAGACGGACGG.....	4	22
.....AATTTTCAAATAAGACGGACGGT.....	12	23
.....AATTTTCAAATAAGACGGACGGTTA.....	10	24
.....AATTTTCAAATAAGACGGACGGTTA.....	2	25
.....ATTTTCAAATAAGACGGACGG.....	3	21
.....ATTTTCAAATAAGACGGACGGT.....	1	22
.....ATTTTCAAATAAGACGGACGGTT.....	7	23
.....ATTTTCAAATAAGACGGACGGTTA.....	23	24
.....TTTTCAAATAAGACGGAC.....	1	18
.....TTTTCAAATAAGACGGACGG.....	2	20
.....TTTTCAAATAAGACGGACGGT.....	34	21
.....TTTTCAAATAAGACGGACGGTT.....	5	22
.....TTTTCAAATAAGACGGACGGTTA.....	6	23
.....TTTTCAAATAAGACGGACGGTTAA.....	4	24
.....TTTCAAATAAGACGGACGG.....	2	18
.....TTTCAAATAAGACGGACGG.....	3	19
.....TTTCAAATAAGACGGACGGT.....	6	20
.....TTTCAAATAAGACGGACGGTT.....	3	21
.....TTTCAAATAAGACGGACGGTTA.....	4	22
.....TTTCAAATAAGACGGACGGTTAA.....	1	23
.....TTCAAATAAGACGGACGGTTAA.....	7	24
.....TTCAAATAAGACGGACGG.....	1	18
.....TTCAAATAAGACGGACGGT.....	4	19
.....TTCAAATAAGACGGACGGTT.....	2	20
.....TTCAAATAAGACGGACGGTTA.....	1	21
.....TTCAAATAAGACGGACGGTTAA.....	1	23
.....TTCAAATAAGACGGACGGTTAAAC.....	8	24
.....TCAAATAAGACGGACGGTT.....	1	19
.....TCAAATAAGACGGACGGTTA.....	1	20
.....TCAAATAAGACGGACGGTTAA.....	2	21
.....AAATAAGACGGACGGTTAA.....	3	19
.....AAATAAGACGGACGGTTAAAC.....	7	20
.....AAATAAGACGGACGGTTAAAC.....	10	21
.....AAATAAGACGGACGGTTAAACG.....	1	22
.....AAATAAGACGGACGGTTAAACGT.....	1	23
.....AATAAGACGGACGGTTAAAC.....	3	20
.....ATAAGACGGACGGTTAAAC.....	1	18
.....ATAAGACGGACGGTTAAACGTTGG.....	2	24
.....TAAGACGGACGGTTAAACGT.....	1	20
.....TAAGACGGACGGTTAAACGTTGGA.....	2	24
.....AAGACGGACGGTTAAACGTTGGA.....	2	23
.....AAGACGGACGGTTAAACGTTGGAC.....	8	24
.....AGACGGACGGTTAAACGTTGGA.....	1	22
.....ACGGACGGTTAAACGTTGGACACG.....	1	24
.....GACGGTTAAACGTTGGACACG.....	1	21

osa-miR812b 22

```

.....GACGGTTAAACGTTGGACACGA..... 2 22
.....GACGGTTAAACGTTGGACACGAA..... 5 23
.....GACGGTTAAACGTTGGACACGAAT..... 8 24
.....GACGGTTAAACGTTGGACACGAATA..... 1 25
.....ACGGTTAAACGTTGGACA..... 1 18
.....ACGGTTAAACGTTGGACACG..... 1 20
.....ACGGTTAAACGTTGGACACGA..... 1 21
.....ACGGTTAAACGTTGGACACGAATA..... 4 24
.....CGTTAAACGTTGGACACG..... 1 19
.....GGTTAAACGTTGGACACGA..... 1 19
.....AACGTTGGACACGAATACATATAG..... 4 24
.....ACGTTGGACACGAATACATATAGC..... 4 24
.....GTTGGACACGAATACATATAGCTG..... 1 24
.....TGGACACGAATACATATAGCTGCA..... 2 24
.....ATAGTCGACTTATTTGGGA..... 1 21
.....ATAGTCGACTTATTTGGGACGG..... 3 24
.....AGCTGCACTTATTTGGGAC..... 1 20
.....AGCTGCACTTATTTGGGACGG..... 1 22
.....AGCTGCACTTATTTGGGACGGA..... 3 23
.....AGCTGCACTTATTTGGGACGGAT..... 2 24
.....GCTGCACTTATTTGGGACGG..... 1 21
.....GCTGCACTTATTTGGGACGGA..... 1 22
.....CTGCACTTATTTGGGACGG..... 1 20
.....CTGCACTTATTTGGGACGGA..... 4 21
.....CTGCACTTATTTGGGACGGATG..... 1 24
.....TGCACTTATTTGGGACGGATGTA..... 1 24
.....GCACCTTATTTGGGACGGA..... 2 19
.....GCACCTTATTTGGGACGGATGAG..... 1 24
.....ACTTATTTGGGACGGATGAGTA..... 1 24

```

```

>osa-miR812c_MIMAT0004051_Oryza_sativa_miR812c
TATTTCTGTTTTATCATTTAAACAATAATAAACCAATCATAAAAAAATTTATAAGACGGACGGTTAAACGTTGGACACGAAACCAAGAATGAGTCTTTTGGGATGGATGGAGATTTGGTAGCAATTAATGA
*****GACGGACGGTTAAACGTTGGAC*****osa-miR812c 22
.....AAAAAAATATATAAGACGGAC..... 4 24
.....AAAAAAATATATAAGACGGACG..... 2 25
.....AAAAAAATATATAAGACGGAC..... 3 23
.....AAAAAAATATATAAGACGGAC..... 1 22
.....ATATAAGACGGACGGTAA..... 1 18
.....ATAAGACGGACGGTTAAA..... 2 20
.....ATAAGACGGACGGTTAAA..... 1 18
.....ATAAGACGGACGGTTAAACGTTGG..... 2 24
.....TAAGACGGACGGTTAAACGTTGG..... 1 20
.....TAAGACGGACGGTTAAACGTTGG..... 2 24
.....AAGACGGACGGTTAAACGTTGG..... 2 23
.....AAGACGGACGGTTAAACGTTGGAC..... 8 24
.....AGACGGACGGTTAAACGTTGG..... 1 22
.....ACGGACGGTTAAACGTTGGACACG..... 1 24
.....GGACGGTTAAACGTTGGACACGGA..... 5 24
.....GACGGTTAAACGTTGGACACG..... 1 21
.....GACGGTTAAACGTTGGACACGG..... 2 22
.....GACGGTTAAACGTTGGACACGGA..... 6 23
.....GACGGTTAAACGTTGGACACGAAA..... 35 24
.....GACGGTTAAACGTTGGACACGAAA..... 1 25
.....ACGGTTAAACGTTGGACA..... 1 18
.....ACGGTTAAACGTTGGACACG..... 1 20
.....ACGGTTAAACGTTGGACACGG..... 4 21
.....ACGGTTAAACGTTGGACACGGA..... 2 22
.....ACGGTTAAACGTTGGACACGAAA..... 3 23
.....ACGGTTAAACGTTGGACACGAAA..... 13 24
.....CGGTTAAACGTTGGACACG..... 1 19
.....CGGTTAAACGTTGGACACGAAA..... 3 24
.....GGTTAAACGTTGGACACGGA..... 1 20
.....GGTTAAACGTTGGACACGAA..... 1 21
.....TTAAACGTTGGACACGGA..... 1 18
.....TTAAACGTTGGACACGAAAAC..... 1 22
.....TAAACGTTGGACACGAAAAC..... 1 20
.....AAACGTTGGACACGAAA..... 1 18
.....AAACGTTGGACACGAAAAC..... 1 19
.....AAACGTTGGACACGAAAACCAAG..... 3 24
.....TTGGACACGAAAACCAAGAA..... 1 21

```

```

>osa-miR812d_MIMAT0004052_Oryza_sativa_miR812d
ATATTTCTGTTTTATCATATAAGAACAAATAAAATACTAATCATAAAAAAGTAAATAAGACGGACGGTTAAACGTTGGACACGAAACCCACTGCCGACTTAAATGGGACTGAGGAGTAGAATATTGGATTTTCGAC
*****GACGGACGGTTAAACGTTGGAC*****osa-miR812d 22
.....ATAAAAAAGTAAATAAGACGGAC..... 1 24
.....AAATAAGACGGACGGTTAA..... 3 19
.....AAATAAGACGGACGGTTAAA..... 7 20
.....AAATAAGACGGACGGTTAAAC..... 10 21
.....AAATAAGACGGACGGTTAAACG..... 1 22
.....AAATAAGACGGACGGTTAAACGT..... 1 23
.....AAATAAGACGGACGGTTAAAC..... 3 20
.....ATAAGACGGACGGTTAAA..... 1 18
.....ATAAGACGGACGGTTAAACGTTGG..... 2 24
.....TAAGACGGACGGTTAAACGTTGG..... 1 20
.....TAAGACGGACGGTTAAACGTTGG..... 2 24
.....AAGACGGACGGTTAAACGTTGG..... 2 23
.....AAGACGGACGGTTAAACGTTGGAC..... 8 24
.....AGACGGACGGTTAAACGTTGG..... 1 22
.....ACGGACGGTTAAACGTTGG..... 1 24
.....GACGGTTAAACGTTGGACACG..... 1 21
.....GACGGTTAAACGTTGGACACGA..... 2 22
.....GACGGTTAAACGTTGGACACGAA..... 5 23
.....GACGGTTAAACGTTGGACACGAAA..... 9 24
.....GACGGTTAAACGTTGGACACGAAA..... 1 25
.....ACGGTTAAACGTTGGACA..... 1 18
.....ACGGTTAAACGTTGGACACG..... 1 20
.....ACGGTTAAACGTTGGACACGA..... 1 21
.....ACGGTTAAACGTTGGACACGAAA..... 1 23
.....ACGGTTAAACGTTGGACACGAAA..... 3 24
.....CGGTTAAACGTTGGACACG..... 1 19
.....GGTTAAACGTTGGACACGA..... 1 19
.....GGTTAAACGTTGGACACGAAAAC..... 1 24
.....AAACGTTGGACACGAAA..... 1 18
.....AAACGTTGGACACGAAAAC..... 2 19
.....CGCACTTAAATGGGACTGAGGGA..... 1 24

```

```

>osa-miR812e_MIMAT0004053_Oryza_sativa_miR812e
ATAAATTAATCTGATCGTGACTTAATTTTAAAAAAATTTTAAAAATTTTAAATAAGACGGACGGTTAAACGTTGGACACGAAACCTTAACTGCACATGAAATGGGACGGAGGAGTACTAGATAAATCTTTGGCC
*****GACGGACGGTTAAACGTTGGAC*****osa-miR812e 22

```

```

.....AAAATTTTAAATAAGACGGACG..... 1 23
.....AAAATTTTAAATAAGACGGACGG..... 8 24
.....AAAATTTTAAATAAGACGGACGG..... 1 23
.....AAAATTTTAAATAAGACGGACGGT..... 3 24
.....AATTTTAAATAAGACGGACG..... 1 21
.....ATTTTAAATAAGACGGACGGTTA..... 1 24
.....TTTTAAATAAGACGGACG..... 1 19
.....TTTTAAATAAGACGGACGG..... 2 20
.....TTTTAAATAAGACGGACGGT..... 14 21
.....TTTTAAATAAGACGGACGGTT..... 6 22
.....TTTTAAATAAGACGGACGGTTA..... 2 23
.....TTTTAAATAAGACGGACGGTTAA..... 2 24
.....TTTTAAATAAGACGGACGG..... 2 19
.....TTTTAAATAAGACGGACGGT..... 3 20
.....TTTTAAATAAGACGGACGGT..... 2 21
.....TTTTAAATAAGACGGACGGTTA..... 2 22
.....TTTTAAATAAGACGGACGGTTAA..... 2 23
.....TTTTAAATAAGACGGACGGTTAAA..... 3 24
.....TTTTAAATAAGACGGACGGTT..... 3 20
.....TTTTAAATAAGACGGACGGTTA..... 5 21
.....TTTTAAATAAGACGGACGGTTAAA..... 1 23
.....TTTTAAATAAGACGGACGGTTAAAC..... 1 24
.....TTTTAAATAAGACGGACGGTT..... 1 19
.....TTTTAAATAAGACGGACGGTTA..... 1 20
.....TTTTAAATAAGACGGACGGTTAAA..... 1 22
.....TTTTAAATAAGACGGACGGTTAAAC..... 1 23
.....AAATAAGACGGACGGTTAA..... 3 19
.....AAATAAGACGGACGGTTAAA..... 7 20
.....AAATAAGACGGACGGTTAAAC..... 10 21
.....AAATAAGACGGACGGTTAAACG..... 1 22
.....AAATAAGACGGACGGTTAAACGT..... 1 23
.....AAATAAGACGGACGGTTAAAC..... 3 20
.....ATAAGACGGACGGTTAAA..... 1 18
.....ATAAGACGGACGGTTAAACGTGG..... 2 24
.....TAAGACGGACGGTTAAACGT..... 1 20
.....TAAGACGGACGGTTAAACGTGGA..... 2 24
.....AAGACGGACGGTTAAACGTGGA..... 2 23
.....AAGACGGACGGTTAAACGTGGAC..... 8 24
.....ACGACGGACGGTTAAACGTGGA..... 1 22
.....ACGACGGTTAAACGTGGACACG..... 1 24
.....GGACGGTTAAACGTGGACACGGA..... 5 24
.....GACGGTTAAACGTGGACACG..... 1 21
.....GACGGTTAAACGTGGACACGG..... 2 22
.....GACGGTTAAACGTGGACACGGA..... 6 23
.....GACGGTTAAACGTGGACACGAAA..... 35 24
.....GACGGTTAAACGTGGACACGAAA..... 1 25
.....ACGGTTAAACGTGGACACG..... 1 18
.....ACGGTTAAACGTGGACACG..... 1 20
.....ACGGTTAAACGTGGACACGG..... 4 21
.....ACGGTTAAACGTGGACACGGA..... 2 22
.....ACGGTTAAACGTGGACACGAAA..... 3 23
.....ACGGTTAAACGTGGACACGAAA..... 13 24
.....CGGTTAAACGTGGACACG..... 1 19
.....CGGTTAAACGTGGACACGAAA..... 3 24
.....GGTTAAACGTGGACACGGA..... 1 20
.....GGTTAAACGTGGACACGGA..... 1 21
.....TTAAACGTGGACACGGA..... 1 18
.....TAAACGTGGACACGGAAC..... 1 20
.....AAACGTGGACACGGA..... 1 18
.....AAACGTGGACACGGAAC..... 1 19

```

```

>osa-miR813_MIMAT0004054_Oryza_sativa_miR813
TCACATAAATAAATCATGGATAATACCTACTTAGATTCGTCCGAAATAGCCATAGGGGTTATGGAATGGGTTTACCACCTAATCTATGTTAATAATCCTAAATAGCAAGATTCTGGAGGGCTATTTAATAGCCCTC
*****GGGTTATGGAATGGGTTTACC*****
.....AATACCTCATTAGATTCGTCTC..... 5 24
.....ATACCTCATTAGATTCGTCTCGCA..... 2 24
.....CTCATTAGATTCGTCTCGCAA..... 2 21
.....CATTAGATTCGTCTCGCAAATAG..... 1 24
.....ATTAGATTCGTCTCGCAAATAGC..... 1 24
.....TTAGATTCGTCTCGCAA..... 1 18
.....TTAGATTCGTCTCGCAAAT..... 3 20
.....TTAGATTCGTCTCGCAAATA..... 4 21
.....TTAGATTCGTCTCGCAAATAGCC..... 1 24
.....TCTCGCAAATAGCCTAGGG..... 1 21
.....GCAAATAGCCTAGGGGTTATGGA..... 1 24
.....AAAATAGCCTAGGGGTTATGGA..... 1 22
.....AATAGCCTAGGGGTTATGGAATGG..... 1 24
.....AGCCTAGGGGTTATGGAATGGGTT..... 2 24
.....AATCCTAAATAGCAAGATTCTGGA..... 2 24
.....CCTAAATAGCAAGATTCTGGAGGG..... 2 24
.....CTAAATAGCAAGATTCTGGAG..... 1 21
.....CTAAATAGCAAGATTCTGGAGGG..... 2 23
.....CTAAATAGCAAGATTCTGGAGGGC..... 26 24
.....CTAAATAGCAAGATTCTGGAGGGCT..... 2 25
.....TAAATAGCAAGATTCTGGA..... 1 19
.....TAAATAGCAAGATTCTGGAGGG..... 1 22
.....TAAATAGCAAGATTCTGGAGGGC..... 2 23
.....AAATAGCAAGATTCTGGAGGG..... 1 21
.....AAATAGCAAGATTCTGGAGGGC..... 4 22
.....AAATAGCAAGATTCTGGAGGGCTA..... 10 24
.....AAATAGCAAGATTCTGGAGGGCTAT..... 2 24
.....ATAGCAAGATTCTGGAGGGC..... 1 20
.....ATAGCAAGATTCTGGAGGGCTATT..... 1 24
.....AGCAAGATTCTGGAGGGCTATTAA..... 1 24
.....AAGATTCTGGAGGGCTATTAA..... 3 22
.....AAGATTCTGGAGGGCTATTAAATA..... 5 24
.....AGATTCTGGAGGGCTATTAAATA..... 1 23
.....AGATTCTGGAGGGCTATTAAATAG..... 34 24
.....GATTCTGGAGGGCTATTAAATAGC..... 1 24

```

```

>osa-miR814a_MIMAT0004055_Oryza_sativa_miR814a
GAGTAGTAAAAAAAATCCTCCCGTCCAATAATATAGTAACTAGTACCGGACGAGACCTTACATAGTACAACGAATCTGGACAGTAAGCTCTCAGATTCTGTACTATGAAGTGCATATCCGGCTCAAGTTGC
*****CACCTTACATAGTACAACGAATCT*****
.....AATATAGTAACTAGTACCGGACG..... 1 24
.....ATAGTAACTAGTACCGGACGAGA..... 1 24
.....TAGTAACTAGTACCGGACGAG..... 1 22
.....AGTAACTAGTACCGGACGAGACA..... 1 24
.....AGTACCGGACGAGACCTTACATAG..... 1 24
.....ACGAGACCTTACATAGTACAACGA..... 1 24
.....TAGTACAACGAATCTGGAC..... 1 19

```



```

.....AGTACAACGAATCTGGAC..... 1 18
.....TCCAGATTCGTTGACTAT..... 1 19
.....TCCAGATTCGTTGACTATGA..... 1 21
.....AGATTCGTTGACTATGAAGTGTCT..... 1 24
.....GATTCGTTGACTATGAAGTGTCA..... 1 24

```

```

>osa-miR814b_MIMAT0004056_Oryza_sativa_miR814b
TTTTCTGAACCTTACTACTCCCTCCGTCATATAGTAATCTAAACCGGACGAGACCTCATAGTACAACGAATCTGGACATGAAGATTCGTTGACTATAAAGTGTCTCGTCTGGTCTAGGTTGCTATATTATA
*****CCTTACATAGTACAACGAATCT*****
.....ACTACTCCCTCCGTCATATA..... 1 21
.....ACGAGACCTTACTACTACACGA..... 1 24
.....TCATAGTACAACGAATCTGGACAT..... 1 24
.....TAGTACAACGAATCTGGAC..... 1 19
.....AGTACAACGAATCTGGAC..... 1 18
.....GTACTATAAAGTGTCTCGTCTGGT..... 4 24
.....ACTATAAAGTGTCTCGTCTGGTCC..... 4 24
.....AAAGTGTCTCGTCTGGTCTAGG..... 1 23

```

```

>osa-miR815a_MIMAT0004058_Oryza_sativa_miR815a
ATTTTATTTAGACTCTTAATTTCTTTTCTAGGATGAACCTTAGGGTGTGTTGAGGGAAGGGGATTGAGGAGATTGGGAGATACGCAAAACGAGGTGAGTCATTAGCTTATGATTAATTGAGTAACTATTTTAA
*****AAGGGGATTGAGGAGATTGGG*****
.....TAGGGTGTGTTGAGGGAAGGG..... 2 23
.....AGGGTGTGTTGAGGGAAGGG..... 2 23
.....AGGGTGTGTTGAGGGAAGGGGA..... 1 24
.....GGGTGTGTTGAGGGAAGGGGA..... 1 23
.....GGGTGTGTTGAGGGAAGGGGAT..... 5 24
.....GGTGTGTTGAGGGAAGGGGAT..... 2 23
.....GGTGTGTTGAGGGAAGGGGATT..... 3 24
.....GTGTGTTGAGGGAAGGGGATT..... 2 23
.....TGTGTTGAGGGAAGGGGATTG..... 3 23
.....TGTGTTGAGGGAAGGGGATTGA..... 3 24
.....GTGTTGAGGGAAGGGGATTGA..... 1 23
.....GTGTTGAGGGAAGGGGATTGAG..... 7 24
.....TGTGAGGGAAGGGGATTGAGG..... 1 24
.....GTTGAGGGAAGGGGATT..... 1 24
.....GTTGAGGGAAGGGGATTGAGG..... 3 23
.....GTTGAGGGAAGGGGATTGAGGA..... 10 24
.....TTGAGGGAAGGGGATTGAG..... 1 21
.....TTGAGGGAAGGGGATTGAGGA..... 2 23
.....TTGAGGGAAGGGGATTGAGGAG..... 3 24
.....TTGAGGGAAGGGGATTGAGGAGA..... 2 24
.....TGAGGGAAGGGGATTGAGGAG..... 1 22
.....TGAGGGAAGGGGATTGAGGAGA..... 3 23
.....TGAGGGAAGGGGATTGAGGAGAT..... 4 24
.....GAGGGAAGGGGATTGAGGAG..... 1 21
.....GAGGGAAGGGGATTGAGGAGAT..... 4 23
.....GAGGGAAGGGGATTGAGGAGATT..... 1 24
.....AGGGAAGGGGATTGAGGAG..... 1 20
.....AGGGAAGGGGATTGAGGAGA..... 1 21
.....AGGGAAGGGGATTGAGGAGAT..... 1 22
.....AGGGAAGGGGATTGAGGAGATT..... 3 23
.....GGGAAGGGGATTGAGGAGATTGG..... 8 24
.....GGGAAGGGGATTGAGGAGTTGGG..... 1 25
.....GGAAGGGGATTGAGGAGA..... 1 19
.....GGAAGGGGATTGAGGAGATTGG..... 13 23
.....GGAAGGGGATTGAGGAGATTGGG..... 13 24
.....AGAAGGGGATTGAGGAGA..... 2 18
.....AGAAGGGGATTGAGGAGAT..... 5 19
.....AGAAGGGGATTGAGGAGATT..... 2 20
.....AGAAGGGGATTGAGGAGATTG..... 2 21
.....AGAAGGGGATTGAGGAGATTGG..... 4 22
.....AGAAGGGGATTGAGGAGATTGGG..... 37 23
.....AGAAGGGGATTGAGGAGATTGGGG..... 1 24
.....AGAAGGGGATTGAGGAGATTGGGGA..... 1 25
.....GAAGGGGATTGAGGAGATTGGG..... 4 22
.....GAAGGGGATTGAGGAGATTGGGG..... 12 23
.....GAAGGGGATTGAGGAGATTGGGGA..... 11 24
.....AAGGGGATTGAGGAGATTGGG..... 1 21
.....AAGGGGATTGAGGAGATTGGGA..... 2 23
.....AAGGGGATTGAGGAGATTGGGAG..... 1 24
.....AGGGGATTGAGGAGATTGG..... 1 19
.....AGGGGATTGAGGAGATTGGG..... 4 20
.....AGGGGATTGAGGAGATTGGGA..... 1 22
.....AGGGGATTGAGGAGATTGGGGA..... 2 23
.....AGGGGATTGAGGAGATTGGGAGA..... 4 24
.....GGGGATTGAGGAGATTGG..... 1 18
.....GGGGATTGAGGAGATTGGG..... 4 19
.....GGGGATTGAGGAGATTGGGG..... 3 20
.....GGGGATTGAGGAGATTGGGGA..... 3 21
.....GGGGATTGAGGAGATTGGGGAG..... 2 22
.....GGGGATTGAGGAGATTGGGGAGA..... 16 23
.....GGGGATTGAGGAGATTGGGGAGAT..... 27 24
.....GGGATTGAGGAGATTGGGGAGA..... 1 22
.....GGGATTGAGGAGATTGGGGAGAT..... 1 23
.....GGGATTGAGGAGATTGGGGAGATA..... 1 24
.....ATTGAGGAGATTGGGGAGA..... 2 19
.....ATTGAGGAGATTGGGGAGATA..... 3 21
.....ATTGAGGAGATTGGGGAGATCCG..... 1 24
.....TGAGGAGATTGGGGAGAT..... 1 18
.....TGAGGAGATTGGGGAGATACGCA..... 4 23
.....TGAGGAGATTGGGGAGATACGCAA..... 11 24
.....GAGGAGATTGGGGAGATACGCA..... 1 22
.....GAGGAGATTGGGGAGATACGCAAA..... 2 24
.....GGAGATTGGGGAGATACGCAAAA..... 1 23
.....GATACGCAAAACGAGGTGAG..... 1 20
.....GATACGCAAAACGAGGTGAGTCAT..... 2 24

```

```

>osa-miR815b_MIMAT0004059_Oryza_sativa_miR815b
GGGTATATCCCAATCTCTCTATTTCTCTCCTCAACACACCTGGGAGTGTGAGGAGGGGATTGAGGAGATTGGGAGATACGTAACGAGGTGAGCCATTAGCTCATGATTAATTGAGTAACTATTTTAA
*****AAGGGGATTGAGGAGATTGGG*****
.....GAGAAGGGGATTGAGGAGA..... 1 19
.....GAGAAGGGGATTGAGGAGATTGG..... 13 23
.....GAGAAGGGGATTGAGGAGATTGGG..... 13 24
.....AGAAGGGGATTGAGGAGA..... 2 18
.....AGAAGGGGATTGAGGAGAT..... 5 19
.....AGAAGGGGATTGAGGAGATT..... 2 20
.....AGAAGGGGATTGAGGAGATTG..... 2 21
.....AGAAGGGGATTGAGGAGATTGG..... 4 22
.....AGAAGGGGATTGAGGAGATTGGG..... 37 23

```

.....AGAAGGGATTGAGGAGATTGGGA.....	18	24
.....GAAGGGATTGAGGAGATTGGG.....	4	22
.....GAAGGGATTGAGGAGATTGGGA.....	56	23
.....GAAGGGATTGAGGAGATTGGGAA.....	36	24
.....AAGGGATTGAGGAGATTGGG.....	1	21
.....AAGGGATTGAGGAGATTGGGA.....	5	22
.....AAGGGATTGAGGAGATTGGGAA.....	6	23
.....AAGGGATTGAGGAGATTGGGAAG.....	1	24
.....AGGGATTGAGGAGATTGG.....	1	19
.....AGGGATTGAGGAGATTGGG.....	4	20
.....AGGGATTGAGGAGATTGGGA.....	1	22
.....AGGGATTGAGGAGATTGGGAAG.....	4	23
.....AGGGATTGAGGAGATTGGGAAG.....	6	24
.....AGGGATTGAGGAGATTGGGAAGT.....	1	25
.....GGGATTGAGGAGATTGG.....	1	18
.....GGGATTGAGGAGATTGGG.....	4	19
.....GGGATTGAGGAGATTGGGA.....	7	20
.....GGGATTGAGGAGATTGGGAAG.....	7	21
.....GGGATTGAGGAGATTGGGAAG.....	4	22
.....GGGATTGAGGAGATTGGGAAG.....	161	23
.....GGGATTGAGGAGATTGGGAAGT.....	100	24
.....GGGATTGAGGAGATTGGGAAG.....	4	20
.....GGGATTGAGGAGATTGGGAAG.....	12	22
.....GGGATTGAGGAGATTGGGAAGT.....	13	23
.....GGGATTGAGGAGATTGGGAAGT.....	3	24
.....GGGATTGAGGAGATTGGGAAGT.....	1	19
.....GGGATTGAGGAGATTGGGAAG.....	1	21
.....GGGATTGAGGAGATTGGGAAGT.....	6	24
.....GGGATTGAGGAGATTGGGAAGTACG.....	1	25
.....GATTGAGGAGATTGGGA.....	2	18
.....GATTGAGGAGATTGGGAAG.....	1	20
.....GATTGAGGAGATTGGGAAGT.....	5	21
.....ATTGAGGAGATTGGGAAG.....	1	18
.....ATTGAGGAGATTGGGAAG.....	12	19
.....ATTGAGGAGATTGGGAAGT.....	5	20
.....ATTGAGGAGATTGGGAAGT.....	11	21
.....ATTGAGGAGATTGGGAAGTAC.....	8	22
.....ATTGAGGAGATTGGGAAGTACG.....	5	23
.....TTGAGGAGATTGGGAAGT.....	1	19
.....TTGAGGAGATTGGGAAGT.....	1	20
.....TTGAGGAGATTGGGAAGTAC.....	3	21
.....TGAGGAGATTGGGAAGTACG.....	1	21
.....TGAGGAGATTGGGAAGTACGTA.....	1	26
.....AGGAGATTGGGAAGTACGTA.....	1	21
.....GGAGATTGGGAAGTACGTA.....	1	24
.....GAGATTGGGAAGTACGTA.....	1	24
.....AGATTGGGAAGTACGTA.....	1	18
.....AGATTGGGAAGTACGTA.....	1	21
.....AGATTGGGAAGTACGTA.....	5	23
.....AGATTGGGAAGTACGTA.....	11	24
.....GATTGGGAAGTACGTA.....	1	24
.....TTGGGAAGTACGTA.....	1	21
.....TGGGAAGTACGTA.....	1	20
.....TGGGAAGTACGTA.....	1	23
.....TGGGAAGTACGTA.....	1	24
.....GGGAAGTACGTA.....	1	20
.....GGGAAGTACGTA.....	2	23
.....GGGAAGTACGTA.....	6	24
.....GGAAGTACGTA.....	1	23
.....GGAAGTACGTA.....	5	24
.....GAGATACGTA.....	1	23
.....GAGATACGTA.....	8	24
.....GAGATACGTA.....	1	25
.....AGATACGTA.....	1	21
.....AGATACGTA.....	5	23
.....AGATACGTA.....	18	24
.....AGATACGTA.....	2	21
.....AGATACGTA.....	1	22
.....AGATACGTA.....	7	23
.....AGATACGTA.....	46	24
.....GATACGTA.....	4	23
.....GATACGTA.....	1	24
.....ATACGTA.....	1	21
.....ATACGTA.....	2	22
.....ATACGTA.....	1	23
.....ATACGTA.....	2	24
.....TACGTA.....	4	21
.....TACGTA.....	1	23
.....AAACGAGGTGAGCCATTAGCTCA.....	1	23
.....CGAGGTGAGCCATTAGCTCATGA.....	3	23
.....CATTAGCTCATGATTAATTGAGTA.....	1	24
.....ATTAGCTCATGATTAATTGAGTA.....	1	23
.....ATTAGCTCATGATTAATTGAGTAT.....	4	24

>osa-miR815c_MIMAT0004060_Oryza_sativa_miR815c
TCACCTCAGCATTAGCCGGCTTATAGCTATACCTCTCTAAGGGTGTGTTGAGGAGAAGGGGATTGAGGAGATTGGGAAGATACGCAAAACGAGGAGAGCCATTAGCTGCTGATTAAGCAACCTTTCTATAGAAA
*****AAGGGATTGAGGAGATTGGG*****

.....CCACCTCAGCATTAGCCGG.....	1	20
.....AGCATTAGCCGGCTTATAGCTA.....	1	24
.....ATTAGCCGGCTTATAGC.....	1	18
.....TAAGGTGTGTTGAGGAGAAGG.....	3	23
.....TAAGGTGTGTTGAGGAGAAGG.....	1	24
.....AAGGTGTGTTGAGGAGAAG.....	1	21
.....AAGGTGTGTTGAGGAGAAG.....	2	22
.....AAGGTGTGTTGAGGAGAAGG.....	2	23
.....AGGTGTGTTGAGGAGAAGG.....	2	23
.....AGGTGTGTTGAGGAGAAGG.....	1	24
.....GGTGTGTTGAGGAGAAGG.....	1	23
.....GGTGTGTTGAGGAGAAGGGAT.....	5	24
.....GGTGTGTTGAGGAGAAGGGAT.....	2	23
.....GGTGTGTTGAGGAGAAGGGAT.....	3	24
.....GTGTGTTGAGGAGAAGGGAT.....	2	23
.....TGTGTTGAGGAGAAGGGATG.....	3	23
.....TGTGTTGAGGAGAAGGGATG.....	3	24
.....GTGTGTTGAGGAGAAGGGATG.....	1	23
.....GTGTGTTGAGGAGAAGGGATG.....	7	24
.....TGTGTTGAGGAGAAGGGATGAGG.....	1	24
.....GTTTGAAGGAGAAGGGAT.....	1	19
.....GTTTGAAGGAGAAGGGATGAGG.....	3	23
.....GTTTGAAGGAGAAGGGATGAGG.....	3	24
.....GTTTGAAGGAGAAGGGATGAGG.....	10	24

osa-miR815c 21

TTTGAGGAAGGGGATTGAG	1	21
TTTGAGGAAGGGGATTGAGGA	2	23
TTTGAGGAAGGGGATTGAGGAG	3	24
TTTGAGGAAGGGGATTGAGGAGA	2	24
TGAGGAAGGGGATTGAGGAG	1	22
TGAGGAAGGGGATTGAGGAGA	3	23
TGAGGAAGGGGATTGAGGAGAT	4	24
GAGGAAGGGGATTGAGGAG	1	21
GAGGAAGGGGATTGAGGAGAT	4	23
GAGGAAGGGGATTGAGGAGATT	1	24
AGGAAGGGGATTGAGGAG	1	20
AGGAAGGGGATTGAGGAGA	1	21
AGGAAGGGGATTGAGGAGAT	1	22
AGGAAGGGGATTGAGGAGATT	3	23
GGGAAGGGGATTGAGGAGATTGG	8	24
GGGAAGGGGATTGAGGAGATTGGG	1	25
GGAAGGGGATTGAGGAGA	1	19
GGAAGGGGATTGAGGAGATTGG	13	23
GGAAGGGGATTGAGGAGATTGGG	13	24
AGAAGGGGATTGAGGAGA	2	18
AGAAGGGGATTGAGGAGAT	5	19
AGAAGGGGATTGAGGAGATT	2	20
AGAAGGGGATTGAGGAGATTG	2	21
AGAAGGGGATTGAGGAGATTGG	4	22
AGAAGGGGATTGAGGAGATTGGG	37	23
AGAAGGGGATTGAGGAGATTGGGA	18	24
GAAGGGGATTGAGGAGATTGGG	4	22
GAAGGGGATTGAGGAGATTGGGA	56	23
GAAGGGGATTGAGGAGATTGGGAA	36	24
AAGGGGATTGAGGAGATTGGG	1	21
AAGGGGATTGAGGAGATTGGGA	5	22
AAGGGGATTGAGGAGATTGGGAA	6	23
AAGGGGATTGAGGAGATTGGGAAG	1	24
AGGGGATTGAGGAGATTGGG	1	19
AGGGGATTGAGGAGATTGGG	4	20
AGGGGATTGAGGAGATTGGGA	1	22
AGGGGATTGAGGAGATTGGGAAG	4	23
AGGGGATTGAGGAGATTGGGAAGA	6	24
AGGGGATTGAGGAGATTGGGAAGAT	1	25
GGGGATTGAGGAGATTGGG	1	18
GGGGATTGAGGAGATTGGG	4	19
GGGGATTGAGGAGATTGGGA	7	20
GGGGATTGAGGAGATTGGGAA	7	21
GGGGATTGAGGAGATTGGGAAG	4	22
GGGGATTGAGGAGATTGGGAAGA	161	23
GGGGATTGAGGAGATTGGGAAGAT	100	24
GGGATTGAGGAGATTGGGA	4	20
GGGATTGAGGAGATTGGGAAGA	12	22
GGGATTGAGGAGATTGGGAAGAT	13	23
GGGATTGAGGAGATTGGGAAGATA	3	24
GGATTGAGGAGATTGGGA	1	19
GGATTGAGGAGATTGGGAAGA	1	21
GGATTGAGGAGATTGGGAAGATAC	6	24
GGATTGAGGAGATTGGGAAGATACG	1	25
GATTGAGGAGATTGGGA	2	18
GATTGAGGAGATTGGGAAGA	1	20
GATTGAGGAGATTGGGAAGAT	5	21
ATTGAGGAGATTGGGAAG	1	18
ATTGAGGAGATTGGGAAGA	12	19
ATTGAGGAGATTGGGAAGAT	5	20
ATTGAGGAGATTGGGAAGATA	11	21
ATTGAGGAGATTGGGAAGATAC	8	22
ATTGAGGAGATTGGGAAGATACG	5	23
ATTGAGGAGATTGGGAAGATACGC	22	24
ATTGAGGAGATTGGGAAGATACGCA	5	25
TTGAGGAGATTGGGAAGAT	1	19
TTGAGGAGATTGGGAAGATA	1	20
TTGAGGAGATTGGGAAGATAC	3	21
TTGAGGAGATTGGGAAGATACGC	1	23
TTGAGGAGATTGGGAAGATACGCA	18	24
TGAGGAGATTGGGAAGATACG	1	21
TGAGGAGATTGGGAAGATACGC	6	22
TGAGGAGATTGGGAAGATACGCA	48	23
TGAGGAGATTGGGAAGATACGCAA	474	24
TGAGGAGATTGGGAAGATACGCAAA	2	25
GAGGAGATTGGGAAGATACGC	8	21
GAGGAGATTGGGAAGATACGCA	15	22
GAGGAGATTGGGAAGATACGCAA	41	23
GAGGAGATTGGGAAGATACGCAAA	32	24
AGGAGATTGGGAAGATACGC	1	20
AGGAGATTGGGAAGATACGCA	2	21
AGGAGATTGGGAAGATACGCAA	2	22
AGGAGATTGGGAAGATACGCAAA	2	23
AGGAGATTGGGAAGATACGCAAAA	6	24
GGAGATTGGGAAGATACGC	1	19
GGAGATTGGGAAGATACGCA	4	20
GGAGATTGGGAAGATACGCAA	10	21
GGAGATTGGGAAGATACGCAAA	1	22
GGAGATTGGGAAGATACGCAAAA	15	23
GGAGATTGGGAAGATACGCAAAAC	16	24
GAGATTGGGAAGATACGC	1	18
GAGATTGGGAAGATACGCA	4	19
GAGATTGGGAAGATACGCAA	8	20
GAGATTGGGAAGATACGCAAA	2	21
GAGATTGGGAAGATACGCAAAA	3	23
GAGATTGGGAAGATACGCAAAAACG	6	24
AGATTGGGAAGATACGCA	3	18
AGATTGGGAAGATACGCAA	6	19
AGATTGGGAAGATACGCAAAA	2	22
AGATTGGGAAGATACGCAAAAACG	3	22
AGATTGGGAAGATACGCAAAAACG	10	23
AGATTGGGAAGATACGCAAAAACG	35	24
AGATTGGGAAGATACGCAAAAACGAG	1	25
GATTGGGAAGATACGCAAA	1	19
GATTGGGAAGATACGCAAAA	1	20
GATTGGGAAGATACGCAAAAACG	1	22
GATTGGGAAGATACGCAAAAACG	3	23
GATTGGGAAGATACGCAAAAACGAG	1	24
GATACGCAAAAACGAGAGAGCCA	1	23
ACGCAAAAACGAGAGAGCCATTAG	1	24


```

.....AAAATCCCTATATATGGGACGG..... 3 24
.....AAATCCCTATATATGGGACGGA..... 11 24
.....AATCCCTATATATGGGACGGA..... 1 23
.....AATCCCTATATATGGGACGGAG..... 1 24
.....ATCCCTATATATGGGACGGAGG..... 4 24
.....TCCTTATATATGGGACGGAGG..... 1 23
.....CCCTTATATATGGGACGGAG..... 1 21
.....CCCTTATATATGGGACGGAGG..... 1 22
.....CCCTTATATATGGGACGGAGGA..... 4 23
.....CCCTTATATATGGGACGGAGGAA..... 11 24
.....CCTTATATATGGGACGGAGG..... 3 21
.....CCTTATATATGGGACGGAGAA..... 4 23
.....CTTATATATGGGACGGAGGA..... 2 21
.....TTATATATGGGACGGAGGAA..... 1 21
.....TATATATGGGACGGAGGA..... 1 19
.....ATATATGGGACGGAGGAA..... 1 19
.....TATTATGGGACGGAGGAAATAAC..... 1 23
.....TATGGGACGGAGGAAATAACAATT..... 1 24
.....AATTAAGGATTGTCACTGCTGT..... 1 24

```

```

>osa-miR819a_MIMAT0004068_Oryza_sativa_miR819a
TTTCAGTAAACAGTAAATGCCAACAGGCTTTCCACATTAGACAATTACTACCTCCGTTTCAGGTTATAAGACTTTCTAGCATGCCACATCATATAGATGTTAATGAATCTAGACATAACATCTATATGAATGTGG
*****TACGTTATAAGACTTTCTAGC*****
.....TACCTCCGTTTCAGGTTATAAGACT..... 1 24
.....TCCGTTTCAGGTTATAAGACT..... 2 21
.....GTTTCAGGTTATAAGACTTTCTAGC..... 1 25
.....TCAGGTTATAAGACTTTCTAGCAT..... 25 24
.....CAGGTTATAAGACTTTCT..... 1 18
.....CAGGTTATAAGACTTTCTAGCA..... 2 22
.....CAGGTTATAAGACTTTCTAGCAT..... 3 23
.....CAGGTTATAAGACTTTCTAGCATT..... 14 24
.....AGGTTATAAGACTTTCTAGCA..... 6 21
.....AGGTTATAAGACTTTCTAGCAT..... 1 22
.....AGGTTATAAGACTTTCTAGCATT..... 2 23
.....AGGTTATAAGACTTTCTAGCATTG..... 1 24
.....GTTATAAGACTTTCTAGCATTGCC..... 6 24
.....TTATAAGACTTTCTAGCAT..... 1 19
.....TTATAAGACTTTCTAGCATT..... 1 20
.....TTATAAGACTTTCTAGCATTG..... 7 21
.....TTATAAGACTTTCTAGCATTG..... 1 22
.....TTATAAGACTTTCTAGCATTGCC..... 2 24
.....TATAAGACTTTCTAGCATT..... 1 19
.....TATAAGACTTTCTAGCATTG..... 1 20
.....ATAAGACTTTCTAGCATT..... 2 18
.....ATAAGACTTTCTAGCATTGCC..... 4 21
.....ATAAGACTTTCTAGCATTGCC..... 7 22
.....ATAAGACTTTCTAGCATTGCCCA..... 9 23
.....ATAAGACTTTCTAGCATTGCCACA..... 85 24
.....TAAGACTTTCTAGCATTGCC..... 18 21
.....TAAGACTTTCTAGCATTGCCCA..... 1 22
.....TAAGACTTTCTAGCATTGCCACA..... 1 23
.....TAAGACTTTCTAGCATTGCCACA..... 11 24
.....AGACTTTCTAGCATTGCC..... 2 20
.....AGACTTTCTAGCATTGCCCA..... 2 21
.....AGACTTTCTAGCATTGCCACA..... 1 22
.....AGACTTTCTAGCATTGCCACA..... 4 23
.....AGACTTTCTAGCATTGCCACAT..... 3 24
.....AGACTTTCTAGCATTGCCACA..... 10 21
.....AGACTTTCTAGCATTGCCACA..... 2 22
.....ACTTTCTAGCATTGCCACA..... 1 19
.....ACTTTCTAGCATTGCCACAT..... 1 21
.....CTAGCATTGCCACATTCAT..... 1 20
.....TAGCATTGCCACATCATATA..... 1 22
.....TTGCCACATTCATATAGTG..... 1 21
.....TTGCCACATTCATATAGTGTT..... 1 23
.....TTTATATAGATGTTAATGAAT..... 2 21
.....ATATAGATGTTAATGAATCTAG..... 1 22
.....ATATAGATGTTAATGAATCTAGGC..... 13 24
.....TATAGATGTTAATGAATCTA..... 1 20
.....ATAGATGTTAATGAATCTAGGC..... 1 22
.....AGATGTTAATGAATCTAGGCA..... 1 21
.....AGATGTTAATGAATCTAGGCATA..... 1 23
.....ATGTTAATGAATCTAGGCATAT..... 1 22

```

```

>osa-miR819b_MIMAT0004069_Oryza_sativa_miR819b
TGAGAGCTAACATCCTTAATTTTTTACACCTCTCCACAGTAAAGCTACTACCTCCGTTTCAGGTTATAAGACTTTCTAGCATTACCCACATCATATAGATGTTAATGAATCTAGACATAACATATGTCTAGATTCAAT
*****TACGTTATAAGACTTTCTAGC*****
.....TACCTCCGTTTCAGGTTATAAGACT..... 1 24
.....TCCGTTTCAGGTTATAAGACT..... 2 21
.....GTTTCAGGTTATAAGACTTTCTAGC..... 1 25
.....TCAGGTTATAAGACTTTCTAGCAT..... 25 24
.....CAGGTTATAAGACTTTCT..... 1 18
.....CAGGTTATAAGACTTTCTAGCA..... 2 22
.....CAGGTTATAAGACTTTCTAGCAT..... 3 23
.....CAGGTTATAAGACTTTCTAGCATT..... 14 24
.....AGGTTATAAGACTTTCTAGCA..... 6 21
.....AGGTTATAAGACTTTCTAGCAT..... 1 22
.....AGGTTATAAGACTTTCTAGCATT..... 2 23
.....TTATAAGACTTTCTAGCAT..... 1 19
.....TTATAAGACTTTCTAGCATT..... 1 20
.....TTATAAGACTTTCTAGCATT..... 2 21
.....TTATAAGACTTTCTAGCATTACCC..... 2 24
.....TATAAGACTTTCTAGCATT..... 1 19
.....ATAAGACTTTCTAGCATT..... 2 18
.....ATAAGACTTTCTAGCATT..... 1 19
.....ATAAGACTTTCTAGCATTACCC..... 3 22
.....ATAAGACTTTCTAGCATTACCCA..... 4 23
.....ATAAGACTTTCTAGCATTACCCAC..... 46 24
.....TAAGACTTTCTAGCATTACCC..... 1 21
.....AGACTTTCTAGCATTACCCA..... 1 21
.....AGACTTTCTAGCATTACCCACA..... 2 23
.....AGACTTTCTAGCATTACCCACAT..... 8 24
.....AGACTTTCTAGCATTACCCACAT..... 1 23
.....AGACTTTCTAGCATTACCCACATT..... 2 24
.....CTTTCTAGCATTACCCACATTCAT..... 1 24
.....AGCATTACCCACATTCATATAGAT..... 1 24
.....ATATAGATGTTAATGAATCTAGA..... 1 23
.....ATATTAATGAATCTAGACATACAT..... 2 24
.....ATTAATGAATCTAGACATACATA..... 1 25

```

>osa-miR819c_MIMAT0004070_Oryza_sativa_miR819c

GAGCAAAGGTATCATGATACCCATTAACTTAGTAACTTAAACACTTACTACCTCCGTTTCAGGTTATAAGACTTTCTAGCATTGCCACATTCATATAGATGTTAATGAATCTAGCCACACATATGTCTAGATTCAAT	osa-miR819c	22
.....TACCTCCGTTTCAGGTTATAAGACTTTCTAGC.....	1	24
.....TCCGTTTCAGGTTATAAGACT.....	2	21
.....GTTTCAGGTTATAAGACTTTCTAGC.....	1	25
.....TCAGGTTATAAGACTTTCTAGCAT.....	25	24
.....CAGGTTATAAGACTTTCT.....	1	18
.....CAGGTTATAAGACTTTCTAGCA.....	2	22
.....CAGGTTATAAGACTTTCTAGCAT.....	3	23
.....CAGGTTATAAGACTTTCTAGCATT.....	14	24
.....AGGTTATAAGACTTTCTAGCA.....	6	21
.....AGGTTATAAGACTTTCTAGCAT.....	1	22
.....AGGTTATAAGACTTTCTAGCATT.....	2	23
.....AGGTTATAAGACTTTCTAGCATTG.....	1	24
.....GTTATAAGACTTTCTAGCATTGCC.....	6	24
.....TTATAAGACTTTCTAGCAT.....	1	19
.....TTATAAGACTTTCTAGCATT.....	1	20
.....TTATAAGACTTTCTAGCATTG.....	7	21
.....TTATAAGACTTTCTAGCATTGC.....	1	22
.....TTATAAGACTTTCTAGCATTGCC.....	2	24
.....TATAAGACTTTCTAGCATT.....	1	19
.....TATAAGACTTTCTAGCATTG.....	1	20
.....ATAAGACTTTCTAGCATT.....	2	18
.....ATAAGACTTTCTAGCATTGCC.....	4	21
.....ATAAGACTTTCTAGCATTGCC.....	7	22
.....ATAAGACTTTCTAGCATTGCCA.....	9	23
.....ATAAGACTTTCTAGCATTGCCAC.....	85	24
.....TAAGACTTTCTAGCATTGCC.....	18	21
.....TAAGACTTTCTAGCATTGCCA.....	1	22
.....TAAGACTTTCTAGCATTGCCAC.....	1	23
.....TAAGACTTTCTAGCATTGCCACAC.....	11	24
.....AAGACTTTCTAGCATTGCC.....	2	20
.....AAGACTTTCTAGCATTGCCA.....	2	21
.....AAGACTTTCTAGCATTGCCAC.....	1	22
.....AAGACTTTCTAGCATTGCCACAC.....	4	23
.....AGACTTTCTAGCATTGCCACAT.....	3	24
.....AGACTTTCTAGCATTGCCAC.....	10	21
.....AGACTTTCTAGCATTGCCACAC.....	2	22
.....ACTTTCTAGCATTGCCAC.....	1	19
.....ACTTTCTAGCATTGCCACAT.....	1	21
.....CTAGCATTGCCACATCAT.....	1	20
.....TAGCATTGCCACATCATATA.....	1	22
.....TTGCCACATCATATAGATG.....	1	21
.....TTGCCACATCATATAGATGT.....	1	23
.....TTCATATAGATGTTAATGAAT.....	2	21
.....ATATAGATGTTAATGAATCTAG.....	1	22
.....ATATAGATGTTAATGAATCTAGGC.....	13	24
.....TATAGATGTTAATGAATCTA.....	1	20
.....ATAGATGTTAATGAATCTAGGC.....	1	22
.....AGATGTTAATGAATCTAGGCA.....	1	21
.....AGATGTTAATGAATCTAGGCACAC.....	3	24
.....GATGTTAATGAATCTAGGCACAC.....	2	24
.....ATGTTAATGAATCTAGGCACAC.....	2	21
.....ATGTTAATGAATCTAGGCACAC.....	1	23
.....ATGTTAATGAATCTAGGCACACAT.....	2	24
.....GTTAATGAATCTAGGCACACATAT.....	3	24
.....GTTAATGAATCTAGGCACACATATA.....	1	25
.....TTAATGAATCTAGGCACACAC.....	4	20
.....TTAATGAATCTAGGCACACAT.....	3	21
.....TTAATGAATCTAGGCACACATATA.....	1	24
.....TAATGAATCTAGGCACACAC.....	1	19
.....TAATGAATCTAGGCACACATATAT.....	2	24
.....AATGAATCTAGGCACACATAT.....	1	21
.....AATGAATCTAGGCACACATATAT.....	1	23
.....AATGAATCTAGGCACACATATATGT.....	33	24
.....ATGAATCTAGGCACACATATGT.....	1	25
.....ATGAATCTAGGCACACATATGT.....	6	23
.....ATGAATCTAGGCACACATATGT.....	10	24
.....ATGAATCTAGGCACACATATATGT.....	1	25
.....TGAATCTAGGCACACATATATGT.....	1	23
.....GGCACACATATATGTCTAGATTCA.....	1	24
.....GCACACATATATGTCTAGATTCA.....	1	24

>osa-miR819d_MIMAT0004071_Oryza_sativa_miR819d

AGGCTAACTTCTATAACTTTGACTATCAATAAATTTAAAATATCTACTACCTCCGTTTCAGGTTATAAGACTTTCTAGCATTGCCACATTCATATAGATGTTAATGAATCTAGCAAGTGTCTAGATTCAATCAACA	osa-miR819d	22
.....TACCTCCGTTTCAGGTTATAAGACTTTCTAGC.....	1	24
.....TCCGTTTCAGGTTATAAGACT.....	2	21
.....GTTTCAGGTTATAAGACTTTCTAGC.....	1	25
.....TCAGGTTATAAGACTTTCTAGCAT.....	25	24
.....CAGGTTATAAGACTTTCT.....	1	18
.....CAGGTTATAAGACTTTCTAGCA.....	2	22
.....CAGGTTATAAGACTTTCTAGCAT.....	3	23
.....CAGGTTATAAGACTTTCTAGCATT.....	14	24
.....AGGTTATAAGACTTTCTAGCA.....	6	21
.....AGGTTATAAGACTTTCTAGCAT.....	1	22
.....AGGTTATAAGACTTTCTAGCATT.....	2	23
.....AGGTTATAAGACTTTCTAGCATTG.....	1	24
.....GTTATAAGACTTTCTAGCATTGCC.....	6	24
.....TTATAAGACTTTCTAGCAT.....	1	19
.....TTATAAGACTTTCTAGCATT.....	1	20
.....TTATAAGACTTTCTAGCATTG.....	7	21
.....TTATAAGACTTTCTAGCATTGC.....	1	22
.....TTATAAGACTTTCTAGCATTGCC.....	2	24
.....TATAAGACTTTCTAGCATT.....	1	19
.....TATAAGACTTTCTAGCATTG.....	1	20
.....ATAAGACTTTCTAGCATT.....	2	18
.....ATAAGACTTTCTAGCATTGCC.....	4	21
.....ATAAGACTTTCTAGCATTGCC.....	7	22
.....ATAAGACTTTCTAGCATTGCCA.....	9	23
.....ATAAGACTTTCTAGCATTGCCAC.....	85	24
.....TAAGACTTTCTAGCATTGCC.....	18	21
.....TAAGACTTTCTAGCATTGCCA.....	1	22
.....TAAGACTTTCTAGCATTGCCAC.....	1	23
.....TAAGACTTTCTAGCATTGCCACAC.....	11	24
.....AAGACTTTCTAGCATTGCC.....	2	20
.....AAGACTTTCTAGCATTGCCA.....	2	21
.....AAGACTTTCTAGCATTGCCAC.....	1	22
.....AAGACTTTCTAGCATTGCCACAC.....	4	23

```

.....AAGACTTTCTAGATTGCCACAT..... 3 24
.....AGACTTTCTAGATTGCCAC..... 10 21
.....AGACTTTCTAGATTGCCACA..... 2 22
.....ACTTTCTAGATTGCCAC..... 1 19
.....ACTTTCTAGATTGCCACAT..... 1 21
.....CTAGATTGCCACATTCAT..... 1 20
.....TAGCATTGCCACATTCATATA..... 1 22
.....TTGCCACATTCATATAGATG..... 1 21
.....TTGCCACATTCATATAGATGTT..... 1 23
.....TTCATATAGATGTTAATGAAT..... 2 21
.....ATATAGATGTTAATGAATCTAG..... 1 22
.....ATATAGATGTTAATGAATCTAGA..... 2 23
.....ATATAGATGTTAATGAATCTAGAC..... 5 24
.....TATAGATGTTAATGAATCTA..... 1 20
.....ATAGATGTTAATGAATCTAGACA..... 1 23

```

>osa-miR819e_MIMAT0004072_Oryza_sativa_miR819e

```

ATTTTTTCAAAATATGTTCAAATCAAATTAAGTGTGTTAATTAAGTACTACCTCCGTTTCAGGTTATAAGACTTTCTAGATTGCCACATTCATATAGATGTTAATGAATCTAGGCACACATATATGCTAGATTCATT
*****TACCTCCGTTTCAGGTTATAAGACTTTCTAGC*****osa-miR819e 22
.....TACCTCCGTTTCAGGTTATAAGACT..... 1 24
.....TCCGTTTCAGGTTATAAGACT..... 2 21
.....GTTTCAGGTTATAAGACTTTCTAGC..... 1 25
.....TCAGGTTATAAGACTTTCTAGCAT..... 25 24
.....CAGGTTATAAGACTTTCT..... 1 18
.....CAGGTTATAAGACTTTCTAGCA..... 2 22
.....CAGGTTATAAGACTTTCTAGCAT..... 3 23
.....CAGGTTATAAGACTTTCTAGCATT..... 14 24
.....AGGTTATAAGACTTTCTAGCA..... 6 21
.....AGGTTATAAGACTTTCTAGCAT..... 1 22
.....AGGTTATAAGACTTTCTAGCATT..... 2 23
.....AGGTTATAAGACTTTCTAGCATTG..... 1 24
.....GTTATAAGACTTTCTAGCATTGCC..... 6 24
.....TTATAAGACTTTCTAGCAT..... 1 19
.....TTATAAGACTTTCTAGCATT..... 1 20
.....TTATAAGACTTTCTAGCATTG..... 7 21
.....TTATAAGACTTTCTAGCATTG..... 1 22
.....TTATAAGACTTTCTAGCATTGCC..... 2 24
.....TATAAGACTTTCTAGCATT..... 1 19
.....TATAAGACTTTCTAGCATTG..... 1 20
.....ATAAGACTTTCTAGCATT..... 2 18
.....ATAAGACTTTCTAGCATTGCC..... 4 21
.....ATAAGACTTTCTAGCATTGCC..... 7 22
.....ATAAGACTTTCTAGCATTGCCCA..... 9 23
.....ATAAGACTTTCTAGCATTGCCAC..... 85 24
.....TAAGACTTTCTAGCATTGCC..... 18 21
.....TAAGACTTTCTAGCATTGCCCA..... 1 22
.....TAAGACTTTCTAGCATTGCCAC..... 1 23
.....TAAGACTTTCTAGCATTGCCACCA..... 11 24
.....AAGACTTTCTAGCATTGCC..... 2 20
.....AAGACTTTCTAGCATTGCCCA..... 2 21
.....AAGACTTTCTAGCATTGCCAC..... 1 22
.....AAGACTTTCTAGCATTGCCACCA..... 4 23
.....AAGACTTTCTAGCATTGCCACAT..... 3 24
.....AGACTTTCTAGCATTGCCAC..... 10 21
.....AGACTTTCTAGCATTGCCACCA..... 2 22
.....ACTTTCTAGCATTGCCACAT..... 1 19
.....ACTTTCTAGCATTGCCACATTCAT..... 1 21
.....CTAGCATTGCCACATTCAT..... 1 20
.....TAGCATTGCCACATTCATATA..... 1 22
.....TTGCCACATTCATATAGATG..... 1 21
.....TTGCCACATTCATATAGATGTT..... 1 23
.....TTGCACATTCATATAGATGTT..... 2 21
.....TTGCACATTCATATAGATGTTAATGAAT..... 2 21
.....ATATAGATGTTAATGAATCTAG..... 1 22
.....ATATAGATGTTAATGAATCTAGGC..... 13 24
.....TATAGATGTTAATGAATCTA..... 1 20
.....ATAGATGTTAATGAATCTAGGC..... 1 22
.....AGATGTTAATGAATCTAGGCA..... 1 21
.....AGATGTTAATGAATCTAGGCACAC..... 3 24
.....GATGTTAATGAATCTAGGCACACA..... 2 24
.....ATGTTAATGAATCTAGGCACACA..... 2 21
.....ATGTTAATGAATCTAGGCACACA..... 1 23
.....ATGTTAATGAATCTAGGCACACAT..... 2 24
.....GTTAATGAATCTAGGCACACATAT..... 3 24
.....GTTAATGAATCTAGGCACACATATA..... 1 25
.....TTAATGAATCTAGGCACACA..... 4 20
.....TTAATGAATCTAGGCACACAT..... 3 21
.....TTAATGAATCTAGGCACACATATA..... 1 24
.....TAATGAATCTAGGCACACA..... 1 19
.....TAATGAATCTAGGCACACATAT..... 2 24
.....AATGAATCTAGGCACACATAT..... 1 21
.....AATGAATCTAGGCACACATATAT..... 1 23
.....AATGAATCTAGGCACACATATATG..... 33 24
.....AATGAATCTAGGCACACATATGT..... 1 25
.....ATGAATCTAGGCACACATATATG..... 6 23
.....ATGAATCTAGGCACACATATATGT..... 10 24
.....ATGAATCTAGGCACACATATGTCT..... 1 25
.....TGAACTAGGCACACATATATGT..... 1 23
.....GGCACACATATATGCTAGATTCAT..... 1 24
.....GCACACATATATGCTAGATTCAT..... 1 24

```

>osa-miR819f_MIMAT0004073_Oryza_sativa_miR819f

```

TGC CGC TGAGT CAG CGT GGG ACC CTG T GAG C C C C A C A T G C T A C A C C C C C G T T C A G G T T A T A A G A C T T T C T A G C A T T G C C C A C A T C A T A T A T G T T A A T G A A T C T A G G C A C A C A T A T A C T G C T A G A T T C A T T
*****TACCTCCGTTTCAGGTTATAAGACTTTCTAGC*****osa-miR819f 22
TGC CGC TGAGT CAG CGT GGG..... 4 19
TGC CGC TGAGT CAG CGT GGG..... 1 21
TGC CGC TGAGT CAG CGT GGG..... 1 22
.....TCCGTTTCAGGTTATAAGACT..... 2 21
.....GTTTCAGGTTATAAGACTTTCTAGC..... 1 25
.....TCAGGTTATAAGACTTTCTAGCAT..... 25 24
.....CAGGTTATAAGACTTTCT..... 1 18
.....CAGGTTATAAGACTTTCTAGCA..... 2 22
.....CAGGTTATAAGACTTTCTAGCAT..... 3 23
.....CAGGTTATAAGACTTTCTAGCATT..... 14 24
.....AGGTTATAAGACTTTCTAGCA..... 6 21
.....AGGTTATAAGACTTTCTAGCAT..... 1 22
.....AGGTTATAAGACTTTCTAGCATT..... 2 23
.....AGGTTATAAGACTTTCTAGCATTG..... 1 24
.....GTTATAAGACTTTCTAGCATTGCC..... 6 24
.....TTATAAGACTTTCTAGCAT..... 1 19
.....TTATAAGACTTTCTAGCATT..... 1 20

```

```

.....TTATAAGACTTTCTAGCATTG..... 7 21
.....TTATAAGACTTTCTAGCATTGC..... 1 22
.....TTATAAGACTTTCTAGCATTGCC..... 2 24
.....TATAAGACTTTCTAGCATT..... 1 19
.....TATAAGACTTTCTAGCATTG..... 1 20
.....ATAAGACTTTCTAGCATT..... 2 18
.....ATAAGACTTTCTAGCATTGCC..... 4 21
.....ATAAGACTTTCTAGCATTGCC..... 7 22
.....ATAAGACTTTCTAGCATTGCC..... 9 23
.....ATAAGACTTTCTAGCATTGCCCA..... 85 24
.....TAAGACTTTCTAGCATTGCCCA..... 18 21
.....TAAGACTTTCTAGCATTGCCCA..... 1 22
.....TAAGACTTTCTAGCATTGCCCA..... 1 23
.....TAAGACTTTCTAGCATTGCCCA..... 11 24
.....AGACTTTCTAGCATTGCC..... 2 20
.....AGACTTTCTAGCATTGCCCA..... 2 21
.....AGACTTTCTAGCATTGCCCA..... 1 22
.....AGACTTTCTAGCATTGCCCA..... 4 23
.....AGACTTTCTAGCATTGCCCAT..... 3 24
.....AGACTTTCTAGCATTGCCCA..... 10 21
.....AGACTTTCTAGCATTGCCCA..... 2 22
.....ACTTTCTAGCATTGCCCA..... 1 19
.....ACTTTCTAGCATTGCCCA..... 1 21
.....CTAGCATTGCCCACTCAT..... 1 20
.....TAGCATTGCCCACTCATATA..... 1 22
.....ATTGCCCACTCATATATG..... 1 22
.....TTGCCCACTCATATATG..... 1 21
.....ATATATGTTAATGAATCTA..... 3 21
.....ATATATGTTAATGAATCTAGGC..... 2 24
.....TATATGTTAATGAATCTAGGC..... 1 23
.....TATATGTTAATGAATCTAGGCA..... 12 24
.....ATATGTTAATGAATCTAG..... 1 20
.....ATATATGTTAATGAATCTAGGCAC..... 7 24
.....TATGTTAATGAATCTAGGCACA..... 2 22
.....ATGTTAATGAATCTAGGCACA..... 2 21
.....ATGTTAATGAATCTAGGCACATA..... 1 23
.....AATGAATCTAGGCACATACATG..... 1 24

```

```

>osa-miR819g_MIMAT0004074_Oryza_sativa_miR819g
ACTCTGGAGTGGAGATGGGAAACTCGATAATTGAACCTTGCATATATCCATCCGTTTCAGGTTATAAGACTTTCTAGCATTGCCCACTCATAGAGATGTTAATGAATCAAGCACACATATGTCTAGATTCA
*****TCAGGTTATAAGACTTTCTAGC*****
.....TACTCCATCCGTTTCAGGTTATAA..... 1 24
.....TCCGTTTCAGGTTATAAGACT..... 2 21
.....GTTTCAGGTTATAAGACTTTCTAGC..... 1 25
.....TCAGGTTATAAGACTTTCTAGCAT..... 25 24
.....CAGGTTATAAGACTTTCT..... 1 18
.....CAGGTTATAAGACTTTCTAGCA..... 2 22
.....CAGGTTATAAGACTTTCTAGCAT..... 3 23
.....CAGGTTATAAGACTTTCTAGCATT..... 14 24
.....AGGTTATAAGACTTTCTAGCA..... 6 21
.....AGGTTATAAGACTTTCTAGCAT..... 1 22
.....AGGTTATAAGACTTTCTAGCATT..... 2 23
.....AGGTTATAAGACTTTCTAGCATTG..... 1 24
.....GTTATAAGACTTTCTAGCATTGCC..... 6 24
.....TTATAAGACTTTCTAGCAT..... 1 19
.....TTATAAGACTTTCTAGCATT..... 1 20
.....TTATAAGACTTTCTAGCATTG..... 7 21
.....TTATAAGACTTTCTAGCATTGC..... 1 22
.....TTATAAGACTTTCTAGCATTGCC..... 2 24
.....TATAAGACTTTCTAGCATT..... 1 19
.....TATAAGACTTTCTAGCATTG..... 1 20
.....ATAAGACTTTCTAGCATT..... 2 18
.....ATAAGACTTTCTAGCATTGCC..... 4 21
.....ATAAGACTTTCTAGCATTGCC..... 7 22
.....ATAAGACTTTCTAGCATTGCCCA..... 9 23
.....ATAAGACTTTCTAGCATTGCCCA..... 85 24
.....TAAGACTTTCTAGCATTGCCCA..... 18 21
.....TAAGACTTTCTAGCATTGCCCA..... 1 22
.....TAAGACTTTCTAGCATTGCCCA..... 1 23
.....TAAGACTTTCTAGCATTGCCCA..... 11 24
.....AGACTTTCTAGCATTGCC..... 2 20
.....AGACTTTCTAGCATTGCCCA..... 2 21
.....AGACTTTCTAGCATTGCCCA..... 1 22
.....AGACTTTCTAGCATTGCCCA..... 4 23
.....AGACTTTCTAGCATTGCCCACT..... 3 24
.....AGACTTTCTAGCATTGCCCA..... 10 21
.....AGACTTTCTAGCATTGCCCA..... 2 22
.....ACTTTCTAGCATTGCCCA..... 1 19
.....ACTTTCTAGCATTGCCCACT..... 1 21
.....CTAGCATTGCCCACTCAT..... 1 20
.....GCACACATATGTCTAGATTCA..... 1 24

```

```

>osa-miR819h_MIMAT0004075_Oryza_sativa_miR819h
TCGGAGTGTGGTAATCCTCTCTTATCTTACTTGTAAATTAAGACTTTCTAGCATTGCCCACTCATATATGTTAATGAATCAAGCACACATATGTCTAGATTCA
*****TCAGGTTATAAGACTTTCTAGC*****
.....TCCGTTTCAGGTTATAAGACT..... 1 21
.....GTTTCAGGTTATAAGACTTTCTAGC..... 1 25
.....TCAGGTTATAAGACTTTCTAGCAT..... 25 24
.....CAGGTTATAAGACTTTCT..... 1 18
.....CAGGTTATAAGACTTTCTAGCA..... 2 22
.....CAGGTTATAAGACTTTCTAGCAT..... 3 23
.....CAGGTTATAAGACTTTCTAGCATT..... 14 24
.....AGGTTATAAGACTTTCTAGCA..... 6 21
.....AGGTTATAAGACTTTCTAGCAT..... 1 22
.....AGGTTATAAGACTTTCTAGCATT..... 2 23
.....AGGTTATAAGACTTTCTAGCATTG..... 1 24
.....GTTATAAGACTTTCTAGCATTGCC..... 6 24
.....TTATAAGACTTTCTAGCAT..... 1 19
.....TTATAAGACTTTCTAGCATT..... 1 20
.....TTATAAGACTTTCTAGCATTG..... 7 21
.....TTATAAGACTTTCTAGCATTGC..... 1 22
.....TTATAAGACTTTCTAGCATTGCC..... 2 24
.....TATAAGACTTTCTAGCATT..... 1 19
.....TATAAGACTTTCTAGCATTG..... 1 20
.....ATAAGACTTTCTAGCATT..... 2 18
.....ATAAGACTTTCTAGCATTGCC..... 4 21
.....ATAAGACTTTCTAGCATTGCC..... 7 22
.....ATAAGACTTTCTAGCATTGCCCA..... 9 23
.....ATAAGACTTTCTAGCATTGCCCA..... 85 24
.....TAAGACTTTCTAGCATTGCCCA..... 18 21

```



```

.....TAAGACTTTCTAGATTGCCA..... 1 22
.....TAAGACTTTCTAGATTGCCAC..... 1 23
.....TAAGACTTTCTAGATTGCCACA..... 11 24
.....AAGACTTTCTAGATTGCC..... 2 20
.....AAGACTTTCTAGATTGCCA..... 2 21
.....AAGACTTTCTAGATTGCCAC..... 1 22
.....AAGACTTTCTAGATTGCCACA..... 4 23
.....AAGACTTTCTAGATTGCCACAT..... 3 24
.....AAGACTTTCTAGATTGCCAC..... 10 21
.....AGACTTTCTAGATTGCCACA..... 2 22
.....ACTTTCTAGATTGCCAC..... 1 19
.....ACTTTCTAGATTGCCACAT..... 1 21
.....CTAGATTGCCACATTCAT..... 1 20
.....TAGATTGCCACATCATATA..... 1 22
.....ATTGCCACATCATATATAG..... 1 22
.....TTGCCACATCATATATAG..... 1 21
.....GGCACACATATGTCTAGATTCA..... 1 24
.....GCACACATATGTCTAGATTCA..... 1 24

```

>osa-miR819i_MIMAT0004076_Oryza_sativa_miR819i

```

TCTGATGTGCTCACATTTCCATGTAATAATCATTGCCACTCATTACTACCTCCGTTTCAGGTTATAAGACTTTCTAGACTTGTCTACATTCGTATAGATTAATGAATCTAGACACATATATGTTTAGATTCA
*****TACGTTATAAGACTTTCTAGC*****
.....TACTCCGTTTCAGGTTATAAGAC..... 1 24
.....TCCGTTTCAGGTTATAAGACT..... 2 21
.....GTTTCAGGTTATAAGACTTTCTAGC..... 1 25
.....TCAGGTTATAAGACTTTCTAGCAT..... 25 24
.....CAGGTTATAAGACTTTCT..... 1 18
.....CAGGTTATAAGACTTTCTAGCA..... 2 22
.....CAGGTTATAAGACTTTCTAGCAT..... 3 23
.....CAGGTTATAAGACTTTCTAGCATT..... 14 24
.....AGGTTATAAGACTTTCTAGCA..... 6 21
.....AGGTTATAAGACTTTCTAGCAT..... 1 22
.....AGGTTATAAGACTTTCTAGCATT..... 2 23
.....AGGTTATAAGACTTTCTAGACTG..... 1 24
.....TTATAAGACTTTCTAGCATT..... 1 19
.....TTATAAGACTTTCTAGCATT..... 1 20
.....TTATAAGACTTTCTAGCTG..... 7 21
.....TATAAGACTTTCTAGCATT..... 1 19
.....TATAAGACTTTCTAGCATTG..... 1 20
.....ATAAGACTTTCTAGCATT..... 2 18
.....ATAAGACTTTCTAGCATTGCT..... 1 21
.....TAAGACTTTCTAGCATTGT..... 1 19
.....AGATTAATGAATCTAGACACAT..... 1 24
.....ATATTAATGAATCTAGACACA..... 1 21
.....ATATTAATGAATCTAGACACATAT..... 2 24
.....TTAATGAATCTAGACACAT..... 1 19
.....TTAATGAATCTAGACACATATAT..... 2 23

```

>osa-miR819j_MIMAT0004077_Oryza_sativa_miR819j

```

ACATATATCATTGATGTTGAACACATATGTAATAGTTAACTTTTACTACCTCCGTTTCAGGTTATAAGACTTTCTAGACTTGCCTACATCATATAGATGTTAATGAATCTAGGCACACATATATGTCTAGATTCA
*****TACGTTATAAGACTTTCTAGC*****
.....TATACTACCTCCGTTTCAGGTTAT..... 1 24
.....TACTCCGTTTCAGGTTATAAGAC..... 1 24
.....TCCGTTTCAGGTTATAAGACT..... 2 21
.....GTTTCAGGTTATAAGACTTTCTAGC..... 1 25
.....TCAGGTTATAAGACTTTCTAGCAT..... 25 24
.....CAGGTTATAAGACTTTCT..... 1 18
.....CAGGTTATAAGACTTTCTAGCA..... 2 22
.....CAGGTTATAAGACTTTCTAGCATT..... 3 23
.....CAGGTTATAAGACTTTCTAGCATT..... 14 24
.....AGGTTATAAGACTTTCTAGCA..... 6 21
.....AGGTTATAAGACTTTCTAGCATT..... 1 22
.....AGGTTATAAGACTTTCTAGCATTG..... 2 23
.....AGGTTATAAGACTTTCTAGCATTG..... 1 24
.....GTTATAAGACTTTCTAGCATTGCC..... 6 24
.....TTATAAGACTTTCTAGCAT..... 1 19
.....TTATAAGACTTTCTAGCATT..... 1 20
.....TTATAAGACTTTCTAGCATTG..... 7 21
.....TTATAAGACTTTCTAGCATTGCT..... 1 22
.....TATAAGACTTTCTAGCATT..... 1 19
.....TATAAGACTTTCTAGCATTG..... 1 20
.....ATAAGACTTTCTAGCATT..... 2 18
.....ATAAGACTTTCTAGCATTGCC..... 4 21
.....ATAAGACTTTCTAGCATTGCCA..... 2 23
.....ATAAGACTTTCTAGCATTGCCCTAC..... 2 24
.....ATAAGACTTTCTAGCATTGCCACA..... 1 25
.....TAAGACTTTCTAGCATTGCCCT..... 4 21
.....AAGACTTTCTAGCATTGCCCT..... 1 20
.....AAGACTTTCTAGCATTGCCACAT..... 2 24
.....CTTTCTAGCATTGCCACATTCAT..... 1 24
.....TTCATATAGATGTTAATGAAT..... 2 21
.....ATATAGATGTTAATGAATCTAG..... 1 22
.....ATATAGATGTTAATGAATCTAGGC..... 13 24
.....TATAGATGTTAATGAATCTA..... 1 20
.....ATAGATGTTAATGAATCTAGGC..... 1 22
.....AGATGTTAATGAATCTAGGCAC..... 1 21
.....AGATGTTAATGAATCTAGGCACAC..... 3 24
.....GATGTTAATGAATCTAGGCACACA..... 2 24
.....ATGTTAATGAATCTAGGCACACA..... 2 21
.....ATGTTAATGAATCTAGGCACACA..... 1 23
.....ATGTTAATGAATCTAGGCACACAT..... 2 24
.....GTTAATGAATCTAGGCACACATAT..... 3 24
.....GTTAATGAATCTAGGCACACATATA..... 1 25
.....TTAATGAATCTAGGCACACA..... 4 20
.....TTAATGAATCTAGGCACACAT..... 3 21
.....TTAATGAATCTAGGCACACATATA..... 1 24
.....TAATGAATCTAGGCACACA..... 1 19
.....TAATGAATCTAGGCACACATATAT..... 2 24
.....AATGAATCTAGGCACACATAT..... 1 21
.....AATGAATCTAGGCACACATATAT..... 1 23
.....AATGAATCTAGGCACACATATATG..... 33 24
.....AATGAATCTAGGCACACATATATGT..... 1 25
.....ATGAATCTAGGCACACATATATG..... 6 23
.....ATGAATCTAGGCACACATATATGT..... 10 24
.....ATGAATCTAGGCACACATATATGCT..... 1 25
.....TGAATCTAGGCACACATATATGT..... 1 23
.....GGCACACATATGTCTAGATTCA..... 1 24
.....GCACACATATGTCTAGATTCA..... 1 24

```

```

>osa-miR819k_MIMAT0004078_Oryza_sativa_miR819k
TCCTCGTAAATTTGGAGATATTGTTCTTTGATGGCTACCATAGTACTACCTCCGTTTCAGGTTATAAGACTTTCTAGCATTGCCATATTCATATAGATGTTAATGAACTTGACACACATATGTCTAGATTCATT
*****TCAGGTTATAAGACTTTCTAGC*****
.....TACCTCCGTTTCAGGTTATAAGAC.....          osa-miR819k  22
.....TCCGTTTCAGGTTATAAGACT.....          1  24
.....GTTTCAGGTTATAAGACTTTCTAGC.....          2  21
.....TCAGGTTATAAGACTTTCTAGCAT.....          1  25
.....CAGGTTATAAGACTTTCT.....          25  24
.....CAGGTTATAAGACTTTCT.....          1  18
.....CAGGTTATAAGACTTTCTAGCA.....          2  22
.....CAGGTTATAAGACTTTCTAGCAT.....          3  23
.....CAGGTTATAAGACTTTCTAGCATT.....          14  24
.....AGGTTATAAGACTTTCTAGCA.....          6  21
.....AGGTTATAAGACTTTCTAGCAT.....          1  22
.....AGGTTATAAGACTTTCTAGCATT.....          2  23
.....AGGTTATAAGACTTTCTAGCATTG.....          1  24
.....GTATAAGACTTTCTAGCATGGCC.....          6  24
.....TTATAAGACTTTCTAGCAT.....          1  19
.....TTATAAGACTTTCTAGCATT.....          1  20
.....TTATAAGACTTTCTAGCATTG.....          7  21
.....TTATAAGACTTTCTAGCATGGC.....          1  22
.....TTATAAGACTTTCTAGCATTGGCC.....          2  24
.....TATAAGACTTTCTAGCATT.....          1  19
.....TATAAGACTTTCTAGCATTG.....          1  20
.....ATAAGACTTTCTAGCATT.....          2  18
.....ATAAGACTTTCTAGCATTGGC.....          4  21
.....ATAAGACTTTCTAGCATTGGCC.....          7  22
.....ATAAGACTTTCTAGCATTGGCCA.....          9  23
.....ATAAGACTTTCTAGCATTGGCCAT.....          30  24
.....TAAGACTTTCTAGCATTGGCC.....          18  21
.....TAAGACTTTCTAGCATTGGCCA.....          1  22
.....AAGACTTTCTAGCATTGGCC.....          2  20
.....AAGACTTTCTAGCATTGGCCA.....          2  21
.....AAGACTTTCTAGCATTGGCCATA.....          1  23
.....AAGACTTTCTAGCATTGGCCATAT.....          1  24
.....AGACTTTCTAGCATTGGCCATA.....          1  22
.....CTTTCTAGACTTGCATATATT.....          1  24
.....TTCTAGCATTGGCCATATTCAT.....          1  22
.....TAGCATTGCCATATTCATAT.....          1  21
.....AGCATTGCCATATTCATATAGAT.....          1  24
.....CATATTCATATAGATGTTAATGAA.....          1  24
.....ATATTCATATAGATGTTAATGAT.....          7  24
.....TATTCATATAGATGTTAATGAAT.....          1  23
.....TTTCATATAGATGTTAATGAAT.....          2  21

```

```

>osa-miR820a_MIMAT0004079_Oryza_sativa_miR820a
GTATCCGTAATAATGTGCTAGCAGTATGTTGAAAGATAGACCTCTGACTGTACATCGCTGGCCTCTGGATGGACAGGAGCTCAACATTCCTTAAGGTTGTTCTTCAAACCCATACAAGGTTCCACCGCTGCATT
*****TCGGCCTCTGGATGGACAG*****
.....TCGGCCTCTGGATGGACAG.....          osa-miR820a  21
.....TCGGCCTCTGGATGGACAGG.....          31  22
.....TCGGCCTCTGGATGGACAGGA.....          52  23
.....TCGGCCTCTGGATGGACAGGAG.....          3574  24
.....CGCCCTCTGGATGGACAGG.....          1  21
.....CGCCCTCTGGATGGACAGGAG.....          20  23
.....CGCCCTCTGGATGGACAGGAGC.....          1  24
.....GGCCTCTGGATGGACAGGAG.....          17  22
.....CCTCTGGATGGACAGGAGC.....          1  21

```

```

>osa-miR820b_MIMAT0004080_Oryza_sativa_miR820b
GTATCCGTAATAATGTGCTAGCAGTATGTTGAAAGATAGACCTCTGACTGTACATCGCTGGCCTCTGGATGGACAGGAGCTCAACATTCCTTAAGGTTGTTCTTCCGACCCATACAAGGTTCCGCTGCATT
*****TCGGCCTCTGGATGGACAG*****
.....TCGGCCTCTGGATGGACAG.....          osa-miR820b  21
.....TCGGCCTCTGGATGGACAGG.....          31  22
.....TCGGCCTCTGGATGGACAGGA.....          52  23
.....TCGGCCTCTGGATGGACAGGAG.....          3574  24
.....CGCCCTCTGGATGGACAGG.....          1  21
.....CGCCCTCTGGATGGACAGGAG.....          20  23
.....CGCCCTCTGGATGGACAGGAGC.....          1  24
.....GGCCTCTGGATGGACAGGAG.....          17  22
.....CCTCTGGATGGACAGGAGC.....          1  21

```

```

>osa-miR820c_MIMAT0004081_Oryza_sativa_miR820c
GTATCCGTAATAATGTGCTAGCAGTATGTTGAAAGATAGACCTCTGACTGTACATCGCTGGCCTCTGGATGGACAGGAGCTCAACATTCCTTAAGGTTGTTCTTCCGACCCATACAAGGTTCCGCTGCATT
*****TCGGCCTCTGGATGGACAG*****
.....ATAGACTCTGACTGTACATGC.....          osa-miR820c  21
.....TCGGCCTCTGGATGGACAGG.....          1  23
.....TCGGCCTCTGGATGGACAGGA.....          31  22
.....TCGGCCTCTGGATGGACAGGAG.....          52  23
.....TCGGCCTCTGGATGGACAGGAG.....          3574  24
.....CGCCCTCTGGATGGACAGG.....          1  21
.....CGCCCTCTGGATGGACAGGAG.....          20  23
.....CGCCCTCTGGATGGACAGGAGC.....          1  24
.....GGCCTCTGGATGGACAGGAG.....          17  22
.....CCTCTGGATGGACAGGAGC.....          1  21
.....ACCAGGAGCTGCATTCCTTA.....          1  22
.....TTAAGGTCGTTCTTCCGA.....          1  19
.....TTAAGGTCGTTCTTCCGACCC.....          1  22
.....TTAAGGTCGTTCTTCCGACCCA.....          4  23
.....TCCGACCCATACAAGGTTCCGC.....          1  22

```

```

>osa-miR1425_MIMAT0005959_Oryza_sativa_miR1425
GATTTGAGCTGTGTTAGGCCAACCCGCTGAAGGAGATGCTCCACTGCTGACTGATTAGGATCAATCCTTCTGCTAAATGTTGTTATTCAGCAATATAATGTTACAGCAAGAAGTGGATCTTAATATA
*****TAGGATTCATCCTTCTGCT*****
.....TTAGGATTCATCCTTCTGCT.....          osa-miR1425  21
.....TTAGGATTCATCCTTCTGCT.....          1  18
.....TTAGGATTCATCCTTCTGCT.....          2  19
.....TTAGGATTCATCCTTCTGCTG.....          71  21
.....TTAGGATTCATCCTTCTGCTCT.....          1  22
.....TAGGATTCATCCTTCTGCT.....          3  18
.....TAGGATTCATCCTTCTGCTG.....          16  19
.....TAGGATTCATCCTTCTGCTG.....          28  20
.....TAGGATTCATCCTTCTGCTGCT.....          924  21
.....TAGGATTCATCCTTCTGCTGCTA.....          13  22
.....TAGGATTCATCCTTCTGCTGCTAA.....          22  23
.....TAGGATTCATCCTTCTGCTGCTAAA.....          2  24
.....AGGATTCATCCTTCTGCTG.....          1  18
.....AGGATTCATCCTTCTGCTG.....          1  19
.....AGGATTCATCCTTCTGCTGCT.....          56  20
.....AGGATTCATCCTTCTGCTGCTAA.....          1  22
.....GGATTCATCCTTCTGCTGCT.....          4  19
.....TTACAGCAGCAAGAAGTGGATC.....          4  21
.....TCAGCAGCAAGAAGTGGATCT.....          27  21
.....TCAGCAGCAAGAAGTGGATCTT.....          1  22

```

```

.....CAGCAGCAAGAAGTGGATCTTA... 1 22
.....CAGCAGCAAGAAGTGGATCTTAA... 1 23
.....CAGCAGCAAGAAGTGGATCTTAAT... 6 24
.....AGCAGCAAGAAGTGGATCTTAA... 1 22
.....AGCAGCAAGAAGTGGATCTTAAT... 8 23
.....GCAGCAAGAAGTGGATCTTAA... 4 21
.....GCAGCAAGAAGTGGATCTTAAT... 10 22
.....GCAGCAAGAAGTGGATCTTAATA... 1 23
.....CAGCAAGAAGTGGATCTTA... 3 19
.....CAGCAAGAAGTGGATCTTAA... 3 20
.....CAGCAAGAAGTGGATCTTAAT... 459 21
.....CAGCAAGAAGTGGATCTTAATA... 1 22
.....AGCAAGAAGTGGATCTTAA... 4 19
.....AGCAAGAAGTGGATCTTAAT... 91 20
.....AGCAAGAAGTGGATCTTAATA... 108 21
.....GCAAGAAGTGGATCTTAAT... 1 19

```

```

>osa-miR1427_MIMAT0005961_Oryza_sativa_miR1427
TATATGCGAGTGCAGCAGGAGTGTGCGCTGTTCTGATTGCGTGGCGGTGGCTGCTGCGAACCTGGCGGTGGCGGGCGCCGGCCTGCGGGACCGCGAGTCGCGCGAGCCAGCCACGGACCGCGGCTCCCA
*****TGCGAACCGTGGCGGTGGCG*****
.....CCGTGCTGCGAACCTGGCGGTGG... 6 24
.....CTGCTGCGAACCTGGCGGTGGC... 2 24
.....GTGCTGCGAACCTGGCGGTGG... 1 20
.....GTGCTGCGAACCTGGCGGTGG... 2 22
.....GTGCTGCGAACCTGGCGGTGG... 4 23
.....GTGCTGCGAACCTGGCGGTGG... 1 24
.....TGCCTGCGAACCTGGCGGTGG... 2 22
.....CTGCGAACCTGGCGGTGGC... 2 20
.....CTGCGAACCTGGCGGTGGC... 1 21
.....CTGCGAACCTGGCGGTGGC... 1 22
.....TGCGAACCTGGCGGTGGC... 4 20
.....TGCGAACCTGGCGGTGGC... 58 21
.....GCGAACCTGGCGGTGGC... 1 20
.....GCGAACCTGGCGGTGGC... 1 24
.....GCGAACCTGGCGGTGGCGGCG... TCGGGACCGCGAGTCGCGCGCA... 1 23
.....GCGAACCTGGCGGTGGCGGCG... GCGGGACCGCGAGTCGCGCGCA... 1 24

```

```

osa-miR1427 21
6 24
2 24
1 20
2 22
4 23
1 24
2 22
2 20
1 21
1 22
4 20
58 21
1 20
1 24
1 23

```

```

>osa-miR1429-5p_MIMAT0009208_Oryza_sativa_miR1429-5p
CTGGCCCTCAGGCCCTCCAGTCAAGTCTGGTTCAGAACAGGCGACCCAGATGAAGTAAATACTACTAATCCGTGCATCATCGTATATCTTACACGTCATGAAAGTCATCGTTTATAATGTTGTATTATAA
*****GTAATATACTAATCCGTGCAT*****
.....GTAATATACTAATCCGTGCATCCA...

```

```

osa-miR1429-5p 21
1 24

```

```

>osa-miR810b.1_MIMAT0005977_Oryza_sativa_miR810b.1
TATATACTACTACTGGTAAGTATCTTAAATACTTACCAGTAGATAGTATAGTGAACCCGATATGCGTCATCATCAAGTATTAATTATGCCGTTAGTTAAGCATCGGAGCCACATGTGGTAGCTTACGA
*****TGAACCCGATATGCGTCATC*****
..ATATACTACTACTGGTAAGTA... 2 22
..TATACTACTACTGGTAAGTA... 1 21
..ATACTACTACTGGTAAGTA... 1 20
.....TACTGGTAAGTATCTTAA... 8 21
.....TACTGGTAAGTATCTTAA... 29 22
.....ACTGGTAAGTATCTTAA... 1 20
.....ACTGGTAAGTATCTTAA... 3 21
.....ACTGGTAAGTATCTTAA... 1 22
.....TGGTAAGTATCTTAAAT... 1 21
.....GATAGTATATAGTGAAC... 1 19
.....GATAGTATATAGTGAAC... 9 21
.....ATAGTATATAGTGAACA... 1 19
.....ATAGTATATAGTGAAC... 4 20
.....ATAGTATATAGTGAAC... 5 21
.....ATAGTATATAGTGAAC... 1 22
.....TAGTATATAGTGAACA... 3 18
.....TAGTATATAGTGAACA... 3 19
.....TAGTATATAGTGAAC... 4 21
.....TAGTATATAGTGAACCGA... 31 22
.....AGTATATAGTGAACCGA... 12 21
.....AGTATATAGTGAACCGAT... 16 22
.....GTATATATAGTGAACCGA... 3 20
.....GTATATATAGTGAACCGAT... 1 21
.....TATATATAGTGAACCGATA... 1 21
.....ATATATAGTGAACCGATG... 8 22
.....ATATATAGTGAACCGATGC... 1 23
.....TATATAGTGAACCGATG... 1 21
.....ATATAGTGAACCGATGC... 6 21
.....ATATAGTGAACCGATGCGTCA... 1 25
.....ATAGTGAACCGATGCGTC... 4 21
.....ATAGTGAACCGATGCGTC... 1 22
.....TAGTGAACCGATGCGTC... 2 21
.....TAGTGAACCGATGCGTCA... 6 22
.....TAGTGAACCGATGCGTCAT... 1 23
.....AGTGAACCGATGCGTCA... 1 21
.....AGTGAACCGATGCGTCAT... 6 22
.....AGTGAACCGATGCGTCATC... 1 23
.....AGTGAACCGATGCGTCATCA... 2 24
.....GTGAACCGATGCGTCAT... 1 21
.....TGAACCGATGCGTCATC... 3 21
.....GAACCGATGCGTCAT... 1 19
.....AACCCGATGCGTCATCAT... 1 21
.....AACCCGATGCGTCATCATCA... 1 24
.....ACCGATGCGTCATCATCA... 2 21
.....ACCGATGCGTCATCATCAAG... 2 22
.....CGATGCGTCATCATCAAGT... 2 22
.....ATATGCGTCATCATCAAGT... 32 21
.....ATATGCGTCATCATCAAGT... 5 23
.....TATGCGTCATCATCAAGT... 2 20
.....TATGCGTCATCATCAAGT... 7 21
.....ATGCGTCATCATCAAGT... 2 21
.....AGTATTAATTATGCCGTTA... 1 21
.....ATTATGCCGTTAGTTAAGCATG... 1 23
.....TTATGCCGTTAGTTAAGCATG... 3 21

```

```

osa-miR810b.1 21
2 22
1 21
1 20
8 21
29 22
1 20
3 21
1 22
1 21
1 19
9 21
1 19
4 20
5 21
1 22
3 18
3 19
4 21
31 22
12 21
16 22
3 20
1 21
1 21
8 22
1 23
1 21
6 21
1 25
4 21
1 22
2 21
6 22
1 23
1 21
6 22
1 23
2 24
1 21
3 21
1 19
1 21
1 24
2 21
2 22
32 21
5 23
2 20
7 21
2 21
1 21
1 23
3 21

```

```

>osa-miR1436_MIMAT0005987_Oryza_sativa_miR1436
CATAGTACAATGACTCAGAGTCTTGTACTATGAAGCTCTATCCAGTCCAGTGGTAAACATTATGGGACGGAGGAGTAGTCTCAACTATATAAACTCTAGCACCCTAATCTCACACAGCACACATGTGCCTTC
*****ACATTATGGGACGGAGGAG*****
.....TCATTGTACTATGAAGCTCTA... 2 23
.....ATTGTACTATGAAGCTCTA... 1 21
.....ATGAAGCTCTATCCAGTCC... 1 21
.....AACATTATGGGACGGAGG... 1 19
.....AACATTATGGGACGGAGG... 2 21

```

```

osa-miR1436 21
2 23
1 21
1 21
1 19
2 21

```

.....AACATTATGGACGGAGGAGTAG..... 1 24
.....ACATTATGGACGGAGG..... 1 18
.....ACATTATGGACGGAGGAG..... 2 20
.....ACATTATGGACGGAGGAGT..... 2 21
.....ATTATGGACGGAGGAGTAG..... 2 21
.....ATTATGGACGGAGGAGTAGT..... 1 22

>osa-miR1437_MIMAT0005988_Oryza_sativa_miR1437
GGCGGAGAGCTTGGCCGGCTCCGCGCACCCGCTACTCTCCCGGTCTGGGAGCTCCGGCGCCACTAGGCACTGTTCTCTCCACCGCGCTCACTCTCTGTGGCCGCTCTCTCTCCG
*****TCCGGCGCCGACTAGGCACTG*****
.....CGTGTGGCAGCTCCGGCC..... osa-miR1437 22
.....CGAGCTCCGGCGCCGACTAGGCA..... 1 21
.....GCTCCGGCGCCGACTAGGCA..... 1 21
.....CTAGGCACTGTTCTCTCC..... 1 19
.....CTAGGCACTGTTCTCTCTCC..... 3 21
.....CTAGGCACTGTTCTCTCTCC..... 1 22
.....TCCCGACGGCCGCTCACTC..... 1 20
.....ACCTCTGCTCTCTGTGCC..... 1 21
.....ACCTCTGCTCTCTGTGCCGCGC..... 1 24
.....CTCTGCTCTCTGTGCCGCG..... 2 21
.....CTCTGCTCTCTGTGCCGCGC..... 1 23
.....TCTGCTCTCTGTGCCGCGC..... 29 21
.....TCTGCTCTCTGTGCCGCGC..... 7 22
.....TCTGCTCTCTGTGCCGCGCT..... 2 23
.....CTGCTCTCTGTGCCGCGC..... 3 20
.....CTGCTCTCTGTGCCGCGC..... 34 21
.....CTGCTCTCTGTGCCGCGCT..... 5 22
.....TCTGCTCTCTGTGCCGCGC..... 2 20
.....TCTGCTCTCTGTGCCGCGC..... 1 21
.....CGTCTCTGTGCCGCGC..... 1 19
.....CGTCTCTGTGCCGCGC..... 1 20
.....CGTCTCTGTGCCGCGC..... 8 21
.....GTCTCTGTGCCGCGC..... 1 20
.....GTCTCTGTGCCGCGCTCC..... 1 21
.....TCCTCTGTGCCGCGCTCT..... 1 21

>osa-miR1441_MIMAT0005991_Oryza_sativa_miR1441
GAACAAAGGCGCTGTTAGTTCGGAAGAAATTTGGGTGTACATCGGAGTTAACCGGATGTGGAAAGGTTTTACAGACGAATAAAAAAATAATTTATAAAGCGCTTAAAGCGGAGCAATCTTT
*****ACCAGGATGTGGAAAGGTT*****
.....TTCCGAAAGAAATTTGGG..... osa-miR1441 21
.....GAAAGAAATTTGGGTGTAC..... 1 23
.....AAAAGAAATTTGGGTGTAC..... 1 24
.....AGAAATTTGGGTGTACATC..... 2 23
.....AAAATTTGGGTGTACATC..... 1 19
.....AAAATTTGGGTGTACATCGGA..... 3 24
.....AAAATTTGGGTGTACATC..... 1 20
.....AAAATTTGGGTGTACATCGGAC..... 24 24
.....AAAATTTGGGTGTACATCGGAC..... 3 23
.....AAAATTTGGGTGTACATCGGAC..... 2 24
.....ATTTTGGGTGTACATCGGA..... 1 21
.....ATTTTGGGTGTACATCGGAC..... 2 23
.....ATTTTGGGTGTACATCGGAGCT..... 2 24
.....ATTTTGGGTGTACATCGGAGTT..... 1 25
.....TTTTTGGGTGTACATCGGAC..... 1 21
.....TTTTTGGGTGTACATCGGAGTT..... 1 24
.....TTTTTGGGTGTACATCGGAC..... 1 20
.....TTTTTGGGTGTACATCGGAGTT..... 3 23
.....TTTTTGGGTGTACATCGGAGTT..... 9 24
.....TTTTTGGGTGTACATCGGAC..... 2 19
.....TTTTTGGGTGTACATCGGAGTT..... 2 22
.....TTTTTGGGTGTACATCGGAGTT..... 3 23
.....TTTTTGGGTGTACATCGGAGTTA..... 1 24
.....TTTTTGGGTGTACATCGGAGTT..... 1 21
.....TTTTTGGGTGTACATCGGAGTT..... 1 20
.....TTTTTGGGTGTACATCGGAGTT..... 3 24
.....ATCCGAGTTAACCGGATGTCCG..... 2 24
.....TCGGAGTTAACCGGATGTCCG..... 1 23
.....CGGAGTTAACCGGATGTCCGA..... 6 23
.....CGGAGTTAACCGGATGTCCGAA..... 6 24
.....GGAGTTAACCGGATGTCCGAA..... 1 23
.....GACGTTAACCGGATGTCCGAA..... 1 23
.....ACGTTAACCGGATGTCCGA..... 1 20
.....ACGTTAACCGGATGTCCGAA..... 10 21
.....ACGTTAACCGGATGTCCGAA..... 1 22
.....CGTTAACCGGATGTCCGAA..... 1 20
.....CAGACGAATAAAAAA..... 1 18
.....AAAAATAATTTATAAAGCGCT..... 1 23
.....AAATAATTTATAAAGCGCT..... 1 18
.....AAACCGGAGCAATCTTT..... 1 19

>osa-miR1442_MIMAT0005992_Oryza_sativa_miR1442
AATCTAAACAGGATATGACACACATTCAGTACAATGATCTGGCAAAATGTATATCTATATCATAGTACTAGATGTGTGCACATCAGTACTAGTTGGTGTGTTTATGGGCAAGGAGTATGATCTTTGCTAAGTGG
*****ATTCTAGTACTAGTGT*****
.....CATTCAGTACAATGATCTGGAC..... osa-miR1442 20
.....ATTCTAGTACTAGTGTGCAC..... 1 24
.....TTTATGGGCAAGGAG..... 1 24
.....TTTTATGGGCAAGGAG..... 1 19
.....TTTTATGGGCAAGGAGT..... 1 20

>osa-miR1846d-5p_MIMAT0007764_Oryza_sativa_miR1846d-5p
CGCCGCCGAGCTCCCTCTGCTCACTCCCTCGCCCTACTCAGCTGTCCCTCCACCGAGCCGATCTCCAGTGAAGGCCGCGCCGAGATCCGGTGACCCCGTCTCTCTCGCCGGTGTATCCG
*****TCCACCGAGCCGATCTCC*****
.....TCCACCGAGCCGATCT..... 2 21
.....TCCACCGAGCCGATCTC..... 10 22
.....TCCACCGAGCCGATCTCC..... 1 23
.....TCCACCGAGCCGATCTC..... 1 20

>osa-miR1849_MIMAT0007769_Oryza_sativa_miR1849
AGCTAACCTAGGATATGGGACATTACCTATAGTATCTGCTAGTAAATGATCCCTATCGTATCTAGTGTGTTATTTGGGACAGGGAATGATGTATGATTAATCTTTGCTACTACAGGATGATCT
*****TATCGTATCTAGTGT*****
.....GCTAACCTAGGATATGGG..... osa-miR1849 21
.....CTAACCTAGGATATGGGAC..... 1 21
.....CTAACCTAGGATATGGGAC..... 1 22
.....ATCTAGATCTGTTACTAGTAA..... 1 23
.....AATGCCCTATCGTATCTAGTGT..... 1 24
.....TATCGTATCTAGTGT..... 10 24
.....TATCGTATCTAGTGT..... 4 20
.....TATCGTATCTAGTGT..... 17 21

```

.....ATGATATCTAGTTGGTTT..... 1 20
.....ATCGTATCTAGTTGGTTTA..... 1 21

>osa-miR1846a-5p_MIMAT0007788_Oryza_sativa_miR1846a-5p
CCTCAACTACTGCGCGTCCACCATTCGCCCTCCCTCAATGAGCGCCGATCTCCAGTGAGGAGCCGGGGCCGCTGGATCCGGTGACCCGTTCTCTCGCCGGGATCCGGCGCTCAGAGAAAGGAGCAGGA
*****AGTGAGGAGCCGGGGCCGCT*****
.....TCTCCAGTGAGGAGCCGGG..... 1 21
.....TCTCCAGTGAGGAGCCGGG..... 1 22
.....AGTGAGGAGCCGGGGCCGCTGGA..... 1 24
.....GAGGAGCCGGGGCCGCTGGA..... 1 21

>osa-miR1846a-3p_MIMAT0007789_Oryza_sativa_miR1846a-3p
CGCTCCCTCAATGAGCCCGGATCTCCAGTGAGGAGCCGGGGCCGCTGGATCCGGTGACCCGTTCTCTCGCCGGGATCCGGCGCTCAGAGAAAGGAGCAGGAACCCTGCTCC
*****AGTGAGGAGCCGGGGCCGCT*****
.....TCTCCAGTGAGGAGCCGGG..... 1 21
.....TCTCCAGTGAGGAGCCGGG..... 1 22
.....AGTGAGGAGCCGGGGCCGCTGGA..... 1 24
.....GAGGAGCCGGGGCCGCTGGA..... 1 21

>osa-miR1846b-5p_MIMAT0007790_Oryza_sativa_miR1846b-5p
CCTCAACTACTGCGCGTCCACCATTCGCCCTCCCTCAATGAGCGCCGATCTCCAGTGAGGAGCCGGGGCCGCTGGATCCAGTGACCCGTTCTCTCGCCGGGATCCGGCGCTCAGAGAAAGGAGCAGGA
*****AGTGAGGAGCCGGGGCCGCT*****
.....TCTCCAGTGAGGAGCCGGG..... 1 21
.....TCTCCAGTGAGGAGCCGGG..... 1 22
.....AGTGAGGAGCCGGGGCCGCTGGA..... 1 24
.....GAGGAGCCGGGGCCGCTGGA..... 1 21

>osa-miR1860-3p_MIMAT0007794_Oryza_sativa_miR1860-3p
TGTAAGAGAAACAGCTCCAGATCTCGAATTCGCTCAAACTATCTTCTCTGTAGATCTGGAAGCTAGTTTCTTCTTACAATAACACTATTTTCCCCATTAGTCTGCCCTGTGTCAGCAGGATGCCGCGC
*****ATCTGGAAGCTAGTTTTCTCT*****
.....TGCTCAAACTATCTTCTCT..... 1 22
.....CTCTGTAGATCTGGAAGCTAGTT..... 1 25
.....TCTGTAGATCTGGAAGCTA..... 1 20
.....GATCTGGAAGCTAGTTTTCTCT..... 1 23

>osa-miR1884a_MIMAT0007795_Oryza_sativa_miR1884a
GTAGTACCTTGTGTCTAGATGACCTCAATATGTACTACTATTCAAAATGTGACCGCTTACTTTATCACAACGTTGACCATCTGTCTATTCAAAAATTAACATAAATGTAAGTATAAGTT
*****GTGACCGCTTACTTTTCA*****
.....ATGTGACCGCTTACTTTCA..... 2 24
.....TGTGACCGCTTACTTTCA..... 1 20
.....TGTGACCGCTTACTTTCA..... 5 21
.....TGTGACCGCTTACTTTCA..... 16 22
.....TGTGACCGCTTACTTTCA..... 2 23
.....AACGTTTGACCATCTGCT..... 1 19
.....AACGTTTGACCATCTGCTTAT..... 1 22
.....AACGTTTGACCATCTGCTTAT..... 1 23
.....GTTTGACCATCTGCTTATCAAA..... 1 24
.....TTGACCATCTGCTTATCAAA..... 2 21
.....TTGACCATCTGCTTATCAAAA..... 1 24
.....TGACCATCTGCTTATCAAA..... 1 21
.....TGACCATCTGCTTATCAAAA..... 1 22
.....ACCATCTGCTTATCAAAA..... 1 21
.....CCATTGCTTATCAAAA..... 2 20

>osa-miR1861d_MIMAT0007799_Oryza_sativa_miR1861d
TACATCTCTCTTATAAAGTTCTGCTGGTCAACTGTGTTGCATATCTTAGCGTGTCTGAGGAGGAAGTGTGTTGAACTCGCTATGTTGTTCTACTCGGACCGGTTCTGTTCCCAAGC
*****TGCTTGAGGAGGAAGTGTGTTGAACTCGCTATGTTGTTCTACTCGGACCGGTTCTGTTCCCAAGC*****
.....TCTTGAGGAGGAAGTGTGTT..... 1 19
.....TGAGGAGGAAGTGTGTTGTT..... 1 24

>osa-miR1862a_MIMAT0007810_Oryza_sativa_miR1862a
AGATTGGTACTCCCTCGCCGAAATACCAACCTCTAGGACATGCATCCTAGTACGAGTGGTTATTTTGGACGGAGGAGTATCCCTACAATATATATTTTTGTTATGGCACAATATCATATCATGCAT
*****ACGAGTGGTTATTTTGGACGG*****
.....CGAGTGGTTATTTTGGACGG..... 1 24
.....GAGTGGTTATTTTGGACGG..... 1 23
.....GAGTGGTTATTTTGGACGG..... 4 24
.....AGGTGGTTATTTTGGACGG..... 3 24
.....GTTGGTTATTTTGGACGGAG..... 1 23
.....TTGGTTATTTTGGACGGAG..... 59 21
.....TGGTTATTTTGGACGGAG..... 6 20
.....TGGTTATTTTGGACGGAG..... 1 24
.....GGTTATTTTGGACGGAG..... 1 19
.....GGTTATTTTGGACGGAGGAGT..... 1 24
.....TTATTTTGGACGGAGGAGTAT..... 1 24
.....TTATTTTGGACGGAGGAGTA..... 2 22
.....TATTTTGGACGGAGGAG..... 1 19
.....TTTTGGACGGAGGAGTAT..... 1 20

>osa-miR1862b_MIMAT0007811_Oryza_sativa_miR1862b
CAAGATTGGCACATAGTACTACGAATCTGGATATCTAGGATGTGTCACTCCCTAGCAGGTGGTTATTTTGGACGGAGGAGTATCCGGATGCTCCAGCATCTCATGACCTATAAGTTTATCCGT
*****ACGAGTGGTTATTTTGGACGG*****
.....AGATTGGCACATAGTACTAC..... 2 24
.....TTGGCACATAGTACTACGA..... 1 22
.....ACATCATAGTACTACGA..... 1 18
.....ACTACGAATCTGGATATCTAGGA..... 3 24
.....ACGAATCTGGATATCTAGGATGT..... 1 24
.....TCTGGATATCTAGGATGTGCAC..... 8 24
.....CGAGTGGTTATTTTGGACGG..... 1 24
.....GAGTGGTTATTTTGGACGG..... 1 23
.....GAGTGGTTATTTTGGACGG..... 4 24
.....AGGTGGTTATTTTGGACGG..... 3 24
.....GTTGGTTATTTTGGACGGAG..... 1 23
.....TTGGTTATTTTGGACGGAG..... 59 21
.....TGGTTATTTTGGACGGAG..... 6 20
.....TGGTTATTTTGGACGGAGGAG..... 1 24
.....GGTTATTTTGGACGGAG..... 1 19
.....TATTTTGGACGGAGGAG..... 1 19
.....TTTTGGACGGAGGAGG..... 1 18

>osa-miR1862c_MIMAT0007812_Oryza_sativa_miR1862c
TATCTACTCCCTCGTCCCAAAATAGTCACTCCGATATGACACTTCTAGTACGAGTGGTTATTTTGGACGGAGGAGTATGACACCTGATATGTAAGTGGCCATATATACATAGGAAGTATAGC
*****ACGAGTGGTTATTTTGGACGG*****
.....CGAGTGGTTATTTTGGACGG..... 1 24

```

```

.....GAGGTTGGTTATTTGGGACGG..... 1 23
.....GAGGTTGGTTATTTGGGACGGA..... 4 24
.....AGGTTGGTTATTTGGGACGGAG..... 3 24
.....TTGGTTATTTGGGACGGAG..... 59 21
.....TGTTTATTTGGGACGGAG..... 6 20
.....TGTTTATTTGGGACGGAGA..... 3 21
.....TGTTTATTTGGGACGGAGAG..... 1 24
.....GGTTTATTTGGGACGGAG..... 1 19
.....TTTATTTGGGACGGAGAG..... 2 21
.....ATTTGGACGGAGAGTAG..... 5 21
.....TTTTGGACGGAGAGT..... 1 18
.....TTTTGGACGGAGAGTAG..... 1 21
.....TGGACGGAGAGTAGATGACA..... 1 23

```

```

>osa-miR1863_MIMAT0007813_Oryza_sativa_miR1863
TGATGGAAGGTTTGCACATAATTTGGTACCAAGTTGCAGTATGGGGAAGCAATAAGCTCTGATACCATGTTAGATTAGTGATGCTCATCCTGATGTTGTGTTGAAGGAATAAACTGGAATATGTTGTGAGA
*****AGCTCTGATACCATGTTAGATTAG*****
.....ATAAGCTCTGATACCATGTTA..... 1 21
.....TAAGCTCTGATACCATGTTAG..... 2 21
.....AAGCTCTGATACCATGTTAGA..... 1 21
.....AAGCTCTGATACCATGTTAGATTA..... 2 24
.....AGCTCTGATACCATGTTAGA..... 21 20
.....AGCTCTGATACCATGTTAGAT..... 9 21
.....AGCTCTGATACCATGTTAGATTA..... 4 23
.....AGCTCTGATACCATGTTAGATTAG..... 458 24
.....GCTCTGATACCATGTTAGA..... 1 19
.....GCTCTGATACCATGTTAGATTAG..... 29 23
.....TCTGATACCATGTTAGAT..... 1 18
.....TCTGATACCATGTTAGATTAG..... 1 21
.....TCTGATACCATGTTAGATTAGTAG..... 3 24
.....ATACCATGTTAGATTAGTAGAT..... 1 21
.....TACCATGTTAGATTAGTAGATA..... 3 21

```

```

>osa-miR1864_MIMAT0007814_Oryza_sativa_miR1864
GTTGCCATGAGAGACTCCCAACACCCACCCCTTTGGTTGTGTCGGAAGAACATTGTAGTAACGTGTTGTAATGTGATGATCATGCTCTTCTATAGTAACGCGTAAATATAGTCATGATGGATCTAGG
*****TTGTAGTAACGTGTTGTAATGTGATGATCATGCTCTTCTATAGTAACGCGTAAATATAGTCATGATGGATCTAGG*****
.....AACATTTGTAACGTGATGTT..... 1 22
.....CATTGTAGTAACGTGATGGTCAAT..... 1 24
.....CATTGTAGTAACGTGATGGTCAATGT..... 1 26
.....ATTGTAGTAACGTGATGGTCAATG..... 4 24
.....TTGTAGTAACGTGATGGTCAA..... 2 21
.....TTGTAGTAACGTGATGGTCAAT..... 1 22
.....TTGTAGTAACGTGATGGTCAATG..... 3 23
.....TTGTAGTAACGTGATGGTCAATGT..... 6 24
.....TGTAAGTAACGTGATGGTCAAT..... 2 21
.....TGTAAGTAACGTGATGGTCAATGT..... 3 24
.....GTAACGTGATGGTCAATGT..... 1 21

```

```

>osa-miR1865-5p_MIMAT0007815_Oryza_sativa_miR1865-5p
GCATATGTTCCATATCTGGGCTCACATCTGCTGACCTTAACCTCGGAACCTGAACTACTGCTAGTGTGTTGATCTTCGACACAGTATTGCGCGAGTTTGGCTTCATCATCGCGTCTGCACATGTTGACGAAGCCTGA
*****TGCTAGTGATGGTATTCTTCGAC*****
.....TGCTAGTGATGGTATTCTTCGAC..... 3 23
.....TGCTAGTGATGGTATTCTTCGAC..... 33 24
.....GCTAGTGATGGTATTCTTCGAC..... 1 23
.....TAGTGATGGTATTCTTCGAC..... 1 21
.....AGTGATGGTATTCTTCGAC..... 1 21

```

```

>osa-miR1867_MIMAT0007818_Oryza_sativa_miR1867
AAAAACAATCTAGCTTTGCATTTGGATAAACACTTTGACAGTTAAAGTTAGGAATGTTTTTTTCTAGGACAGAGGAGTAGATGTAATTTGTCATAGGAAGTGGTAGTCCAGTGGCACAACCTGTTGGTGG
*****TTTTTTTTCTAGGACAGAGGAGT*****
.....AATTGTTTTTTCTAGGACAGAG..... 1 23
.....AATTGTTTTTTCTAGGACAGAGG..... 26 25
.....ATTGTTTTTTCTAGGACAGAGG..... 3 24
.....TTGTTTTTTCTAGGACAGAGCA..... 1 19
.....TTGTTTTTTCTAGGACAGAGGGA..... 1 25
.....TGTTTTTTCTAGGACAGAG..... 1 21
.....GTTTTTTCTAGGACAGAGGAG..... 33 24
.....GTTTTTTCTAGGACAGAGGAGT..... 3 25
.....TTTTTTTTCTAGGACAGAGGGA..... 2 22
.....TTTTTTTTCTAGGACAGAGGAG..... 1 23
.....TTTTTTTTCTAGGACAGAGGAGT..... 41 24
.....TTTTTTTTCTAGGACAGAGGAGTA..... 1 25
.....TTTTTTCTAGGACAGAGGAG..... 3 22
.....TTTTTTCTAGGACAGAGGAGT..... 11 23
.....TTTTTTCTAGGACAGAGGAG..... 1 22
.....TTTTTTCTAGGACAGAGG..... 1 18
.....TTTTTTCTAGGACAGAGGAG..... 1 20
.....TTTTTTCTAGGACAGAGGAGT..... 6 21
.....TTTTTTCTAGGACAGAGGAGTAGA..... 8 24
.....TCTAGGACAGAGGAGTAGATGTG..... 3 24
.....TAGGACAGAGGAGTAGATGT..... 9 21
.....AGGACAGAGGAGTAGATGTG..... 1 21
.....AGGACAGAGGAGTAGATGTG..... 1 22
.....GGACAGAGGAGTAGATGTG..... 1 21
.....ACAGAGGAGTAGATGTGTA..... 4 21
.....CAGAGGAGTAGATGTGTAAT..... 3 21
.....AGGAGTAGATGTGTAATTTGTGC..... 2 24

```

```

>osa-miR1868_MIMAT0007820_Oryza_sativa_miR1868
GAGTTGATAACAATGGAAGGCTTTGATAAACACTATTGACAGTTGGAAGCTGCTCAGGAAAACGAGGAGCAGCAAGGACTTGTCTACCGGTTATGAATGGCTACTCTGTTTCCGTAACACGCTTC
*****TACGGAAGAACGAGGAGCAGCA*****
.....TTTGAAGCTGCTCAGGAAAA..... 1 24
.....TGAAGCTGCTCAGGAAAA..... 15 21
.....TGAAGCTGCTCAGGAAAA..... 2 22
.....GGAAGCTGCTCAGGAAAAACA..... 2 24
.....GAAAGCTGCTCAGGAAAAACGAG..... 5 24
.....AAGCTGCTCAGGAAAAACGAGG..... 3 24
.....AAGCTGCTCAGGAAAAACGAGGA..... 1 25
.....AGCTGCTCAGGAAAAACGAGG..... 1 23
.....AGCTGCTCAGGAAAAACGAGGA..... 17 24
.....GCTGCTCAGGAAAAACGAGGAG..... 92 24
.....TCAGGAAAAACGAGGAGCAG..... 3 21
.....TCAGGAAAAACGAGGAGCAGCA..... 113 24
.....CACGAAAAACGAGGAGCAGC..... 4 21
.....CACGAAAAACGAGGAGCAGCA..... 3 23
.....CACGAAAAACGAGGAGCAGCAA..... 5 24
.....ACGAAAAACGAGGAGCAGC..... 2 21

```

```

.....ACGGAAAAAGGGAGCAGCA..... 5 22
.....ACGGAAAAAGGGAGCAGCA..... 5 23
.....ACGGAAAAAGGGAGCAGCA..... 32 24
.....CGGAAAAAGGGAGCAGCA..... 1 22
.....CGGAAAAAGGGAGCAGCA..... 1 23
.....GAAAAAGGGAGCAGCAAGGCA..... 1 24
.....CGGGAGCAGCAAGGCA..... 1 19
.....GCTACTCTCGTTTCC..... 2 18
.....TCCTGTTTCCGTAACACGCTT..... 1 24

```

```

>osa-miR1812f_MIMAT0007821_Oryza_sativa_miR1812f
ACAATAGTACTTTATGTGACTTATGTTCTTACGTTTTTCAAAAAAATAAATAAACGGATGATTAAGTTGGACACGAAATTCATGGCTATGCTTATTTGGACGGAATCTTAGCTTGGGTGGATTGATC
*****ACGGATGATTAAGTTGGACACGG*****
...AATAGTACTTTATGTGACTTA.....
.....ACGGATGATTAAGTTGGACACGG..... 1 23
.....ACGGATGATTAAGTTGGACACGG..... 1 23
.....ACGGATGATTAAGTTGGACACGG..... 4 24
.....CGGATGATTAAGTTGGACACGGA..... 1 24
.....GGATGATTAAGTTGGACACGGAA..... 3 24
.....GATGATTAAGTTGGACACGGA..... 1 23
.....GATGATTAAGTTGGACACGGA..... 23 24
.....ATGATTAAGTTGGACACGG..... 1 19
.....ATGATTAAGTTGGACACGGAAT..... 1 24
.....ATTAAGTTGGACACGGA..... 1 18
.....ATTAAGTTGGACACGGAAT..... 1 21
.....TTAAAGTTGGACACGGA..... 1 19
.....TTAAAGTTGGACACGGAAT..... 1 21
.....GTTGGACACGGAATTCATGGCTA..... 1 24
.....GGCTATGCTTATTTGGACGGAA..... 1 24

```

```

>osa-miR1869_MIMAT0007822_Oryza_sativa_miR1869
ATCCTTGATCCCTCTTTGATAACTCGTCAAGCCAAAAGGAAGGAAAGAACACCTGAGAACAAATAGGCATGGGAGTATTGGAAAAACACAGGACATATTGTGCCCTAATTTAAAGGAAATGATGTTGAGGC
*****TGAGAACAAATAGGCATGGGAGT*****
.....AGGAAAGGAACACCTGAGCA..... 2 21
.....AGGAAAGGAACACCTGAGCA..... 1 21
.....GGAACCTGAGAACAAATAGGCAT..... 1 24
.....ACACCTGAGAACAAATAGGCA..... 2 21
.....ACACCTGAGAACAAATAGGCAT..... 2 21
.....CCTGAGAACAAATAGGCATGGG..... 1 21

```

```

>osa-miR1870_MIMAT0007823_Oryza_sativa_miR1870
TAGCTGAGTGAAGTCTTAGTGTCAAAGTAATGGAGATTGGGAAATAAATCGGTTTCATGCTGAATTAGACCTAGTGGGCATTATACATCAACAACATGGTACTGTTGCCCTTCTTTCTAGCCTAGTGTGTGAT
*****TGCTGAATTAGACCTAGTGGGCAT*****
.....CTGGCTTCATGCTGAATTAGACCT..... 1 24
.....TTATGCTGAATTAGACCTAG..... 2 21
.....TTATGCTGAATTAGACCTAGT..... 11 22
.....TTATGCTGAATTAGACCTAGT..... 1 23
.....TTATGCTGAATTAGACCTAGTG..... 1 24
.....ATGCTGAATTAGACCTAGTGGCA..... 14 24
.....TGCTGAATTAGACCTAGTGGCA..... 6 23
.....TGCTGAATTAGACCTAGTGGGCAT..... 1313 24
.....TGCTGAATTAGACCTAGTGGGCATT..... 4 25
.....GCTGAATTAGACCTAGTGGGCAT..... 107 23
.....GCTGAATTAGACCTAGTGGGCATT..... 5 24
.....CTGAATTAGACCTAGTGGGCAT..... 1 22
.....TGAATTAGACCTAGTGGCA..... 1 20
.....TGAATTAGACCTAGTGGGCAT..... 79 21
.....TGAATTAGACCTAGTGGGCATT..... 1 22
.....GAATTAGACCTAGTGGGCAT..... 1 20
.....AATTAGACCTAGTGGGCAT..... 1 19
.....AATTAGACCTAGTGGGCATT..... 1 21
.....AATTAGACCTAGTGGGCATTAT..... 2 23
.....AATTAGACCTAGTGGGCATTATA..... 33 24
.....AATTAGACCTAGTGGGCATTATAC..... 1 25
.....ATTAGACCTAGTGGGCAT..... 2 18
.....ATTAGACCTAGTGGGCATT..... 1 19
.....ATTAGACCTAGTGGGCATT..... 2 20
.....ATTAGACCTAGTGGGCATTAT..... 2 21
.....ATTAGACCTAGTGGGCATTATAT..... 15 22
.....ATTAGACCTAGTGGGCATTATATA..... 61 23
.....ATTAGACCTAGTGGGCATTATAC..... 858 24
.....ATTAGACCTAGTGGGCATTATACA..... 3 25
.....TTAGACCTAGTGGGCATTATAC..... 11 23
.....TTAGACCTAGTGGGCATTATACA..... 1 24
.....TAGACCTAGTGGGCATTATAC..... 1 22
.....AGTGGGCATTATACATCAACA..... 1 21
.....AGTGGGCATTATACATCAACA..... 336 24
.....AGTGGGCATTATACATCAACAAC..... 48 25
.....GTGGGCATTATACATCAACA..... 3 23
.....TGGGCATTATACATCAACA..... 1 21
.....TGGGCATTATACATCAACA..... 6 24
.....GGCATTATACATCAACA..... 1 22

```

```

>osa-miR1871_MIMAT0007824_Oryza_sativa_miR1871
TTCTCTCAAATCTAACATGGTATCGGATAGGTGAGCCATGATCACTTAAAGCTATGGCTCTGATATCATGTTGGTTTGAAGAAATGACTGATATATTTCAATGTAGCCAGTATGCTATATATAGAGCATATAG
*****ATGGCTCTGATATCATGTTGGTT*****
.....ATGGCTCTGATATCATGTTGGTT..... 1 23
.....ATGGCTCTGATATCATGTTGGTT..... 5 24
.....TGGCTCTGATATCATGTTGGTT..... 1 24
.....ATATCATGTTGGTTTGAAGGAA..... 1 23
.....ATATCATGTTGGTTTGAAGGAA..... 3 24
.....CATGTTGGTTTGAAGGAAATG..... 1 22

```

```

>osa-miR1872_MIMAT0007825_Oryza_sativa_miR1872
ACCCCTTTCTAAATTTGATAAATCTCAATGCTGTGGAGACTTATGGTTGAAGTCTGTAAGTCTGTGACGGTAAACGAGCATGTACCGTGGGCAACCGCATGGCAATGTACCTGCCCTCATGTAGTAAC
*****GAACTGTAAGTCTGTGACGGTAA*****
.....AATGCTTTGGAGACTTATGGTT.....
.....TTGAAGTCTGTAAGTCTGTGACGGT..... 1 24
.....TGAAGTCTGTAAGTCTGTGACGGTAA..... 2 24
.....GAACTGTAAGTCTGTGACGG..... 1 20
.....GAACTGTAAGTCTGTGACGGTAA..... 1 23
.....GAACTGTAAGTCTGTGACGGTAA..... 4 24
.....AACTGTAAGTCTGTGACGGTAA..... 1 24
.....TGTAAAGTCTGTGACGGTAAACG..... 1 23
.....AAGTCTGTGACGGTAAACGAGCA..... 1 24
.....TGACGGTAAACGAGCATGTAC..... 1 22
.....CATGTACCGTGGCAACCGGCA..... 1 23
.....ACCGTGGCAACCGCATGGACA..... 1 24

```

.....TGGCAACCGCATGGACAAT.....	1	21
>osa-miR1873_MIMAT0007826_Oryza_sativa_miR1873		
GATTGCCACCTTTTCCCAATAATTAAAGCTCTGGATTGGCTGTAGATTGAACCTCAACATGGTATCAGAGCTGGAAGCTCTAAAGTTGACATCATGATAGCTGACGATGGTGGAGACCATGTAAGCTGATACCAT		
*****TCAACATGGTATCAGAGCTGGAAG*****	osa-miR1873	24
.....ACCTCAACATGGTATCAGAGCT.....	1	21
.....ACCTCAACATGGTATCAGAGCTGG.....	4	24
.....CCTCAACATGGTATCAGAGCTGG.....	1	23
.....CCTCAACATGGTATCAGAGCTGGA.....	1	24
.....CTCAACATGGTATCAGAGCTGGA.....	1	23
.....CTCAACATGGTATCAGAGCTGGA.....	1	24
.....TCAACATGGTATCAGAGCTGG.....	3	21
.....TCAACATGGTATCAGAGCTGGA.....	2	23
.....TCAACATGGTATCAGAGCTGGAAG.....	14	24
.....AACATGGTATCAGAGCTGG.....	3	19
.....ACATGGTATCAGAGCTGGAAG.....	2	21
.....ATCAGAGCTGGAAGCTCTAA.....	1	21
.....ATCAGAGCTGGAAGCTCTAAAGT.....	1	23
>osa-miR1874-3p_MIMAT0007828_Oryza_sativa_miR1874-3p		
TACACCATCCATAAGGGTTCCGAATCTTCGATGTGCCTAGATAGGGTACAGTTGGATCCATATGGATGGAGTGTAAACCCGATGCCTTTTACAATAGATGGTTATTTTTTATGATCCACTCTTTGTTTCTTTCTTC		
*****TATGGATGGAGGTGAACCCGATG*****	osa-miR1874-3p	24
.....TATGGATGGAGGTGAACCCGAT.....	1	23
.....TATGGATGGAGGTGAACCCGATG.....	1	24
>osa-miR1875_MIMAT0007829_Oryza_sativa_miR1875		
GTACATGGCACTTTAAACAGTATTTGATACAGTACTAGGCTGCAGTTGAGCGAAACACAATGGAGTGAAGTGAACAGAAATGAACATTATGGCAGAAAGTAAAGTTTGTCAAACCTCGGGGACAAGTGAATTTTG		
*****ACAATGGAGTGAAGTGAACAGAA*****	osa-miR1875	24
.....ATTGATACAGTACTAGGC.....	2	20
.....TTTGATACAGTACTAGGCT.....	1	20
.....AGTGAAGTGGCTGCAGTTGAG.....	1	21
.....ACAATGGAGTGAAGTGAACAA.....	6	22
.....ACAATGGAGTGAAGTGAACAG.....	8	23
.....ACAATGGAGTGAAGTGAACAGAA.....	14	24
.....ACAATGGAGTGAAGTGAACAGAAA.....	3	25
.....CAATGGAGTGAAGTGAACAG.....	1	21
.....AATGGAGTGAAGTGAACAG.....	1	20
.....AATGGAGTGAAGTGAACAGAA.....	1	21
.....AATGGAGTGAAGTGAACAGAAA.....	6	22
.....AATGGAGTGAAGTGAACAGAAA.....	7	23
.....ATGGAGTGAAGTGAACAG.....	3	19
.....ATGGAGTGAAGTGAACAGAA.....	4	20
.....ATGGAGTGAAGTGAACAGAAA.....	10	21
.....ATGGAGTGAAGTGAACAGAAA.....	25	22
.....ATGGAGTGAAGTGAACAGAAAT.....	1	23
.....ATGGAGTGAAGTGAACAGAAATG.....	1	24
.....GGAGTGAAGTGAACAGAAAT.....	1	21
.....TGAAGTGAACAGAAATGAAC.....	1	21
.....ACAGAAATGAACATTATGGCA.....	1	21
.....AACTGCGGGGACAAGTGA.....	3	21
>osa-miR1862d_MIMAT0007830_Oryza_sativa_miR1862d		
ACTCCCTCTGTCCAAAATAAACAAAGCTAGTACGGGATGTGGCACTTCCTAGTCTGACTAGGTTGTTTATTTTGGGACGGAGGATATCATAGTTGTTACTCTCTGTTACTATTTATCTTTTGGCTCCTAACCT		
*****ACTAGGTTGTTTATTTTGGGACG*****	osa-miR1862d	24
.....CCAAAATAAACAAAGCTAGTAC.....	1	22
.....CAAAATAAACAAAGCTAGTACGGG.....	1	24
.....AAAATAAACAAAGCTAGTACGGGG.....	10	24
.....AAATAAACAAAGCTAGTACGGGG.....	11	23
.....AAATAAACAAAGCTAGTACGGGG.....	1	24
.....AAATAAACAAAGCTAGTACGGGG.....	1	22
.....AAACAAGCTAGTACGGGGATGT.....	1	23
.....AACTAGTACGGGGATGTGCCA.....	1	22
.....AACTAGTACGGGGATGTGCCAC.....	1	23
.....TACTAGGTTGTTTATTTTGGGACG.....	1	25
.....ACTAGGTTGTTTATTTTGG.....	1	19
.....ACTAGGTTGTTTATTTTGGGA.....	9	22
.....ACTAGGTTGTTTATTTTGGGAC.....	13	23
.....ACTAGGTTGTTTATTTTGGGACG.....	301	24
.....CTAGGTTGTTTATTTTGGG.....	1	20
.....CTAGGTTGTTTATTTTGGGA.....	2	21
.....CTAGGTTGTTTATTTTGGGACG.....	13	23
.....CTAGGTTGTTTATTTTGGGACGG.....	53	24
.....TAGGTTGTTTATTTTGGGAC.....	2	21
.....TAGGTTGTTTATTTTGGGACG.....	15	22
.....TAGGTTGTTTATTTTGGGACGG.....	46	23
.....TAGGTTGTTTATTTTGGGACGGA.....	154	24
.....TAGGTTGTTTATTTTGGGACGGAG.....	3	25
.....AGGTTGTTTATTTTGGGACGG.....	6	22
.....AGGTTGTTTATTTTGGGACGGA.....	14	23
.....AGGTTGTTTATTTTGGGACGGAG.....	63	24
.....GGTTGTTTATTTTGGGACGG.....	1	21
.....GGTTGTTTATTTTGGGACGGA.....	1	22
.....GGTTGTTTATTTTGGGACGGAG.....	16	23
.....GGTTGTTTATTTTGGGACGGAGG.....	172	24
.....GTTGTTTATTTTGGGACGGAGG.....	2	23
.....GTTGTTTATTTTGGGACGGAGG.....	1	24
.....TTGTTTATTTTGGGACGGGA.....	2	20
.....TTGTTTATTTTGGGACGGAG.....	14	21
.....TTGTTTATTTTGGGACGGAGG.....	1	22
.....TTGTTTATTTTGGGACGGAGGA.....	1	24
.....TTGTTTATTTTGGGACGG.....	1	18
.....TTGTTTATTTTGGGACGGAG.....	3	20
.....TTGTTTATTTTGGGACGGAGG.....	10	21
.....TGTTTATTTTGGGACGGAGGAGT.....	4	24
.....TTTATTTTGGGACGGAGGAGTAT.....	1	24
.....TTTATTTTGGGACGGAGGAGTA.....	2	22
.....TATTTTGGGACGGAGGAGG.....	1	19
.....TTTTGGGACGGAGGAGTAT.....	1	20
>osa-miR1876_MIMAT0007831_Oryza_sativa_miR1876		
TGAACCCATTATGGCTATTCAAGTGGTAAACATAGTTGGTGCATTAATGGCCTATAAGTGGTGTGGGCTGGCCCTCTGTATCTCTGATAGTTAGTATGTTGTAATAATGAACAAGTACTTTTAAATTTAA		
*****ATAAGTGGTGTGGGCTGGCC*****	osa-miR1876	24
.....ATGGCCTATAAGTGGTGTGG.....	1	23
.....ATAAGTGGTGTGGGCTGGC.....	1	22
.....ATAAGTGGTGTGGGCTGGCC.....	1	23
.....ATAAGTGGTGTGGGCTGGCC.....	76	24


```

.....TAAGTGGTTTGTGGCTGCCCC..... 2 23

>osa-miR1884b_MIMAT0007832_Oryza_sativa_miR1884b
TCATAGCTAGATATAGTACACCTTGGGATGGATGTAGTATTGTACTCCCTCTGTTTAAATGTATGACGCTGTGACTTTAGATATATGTTGACAATCGTCTTATTCAAAAATCGAGCAAAATATAAAAAATAGTGTAG
*****AAATGTATGACGCTGTGACTTTTA..... 24
.....TTAAATGTATGACGCTGTGACTTT..... 1 24
.....AATGTATGACGCTGTGACTTT..... 3 20
.....AATGTATGACGCTGTGACTTTTA..... 17 24
.....ATGTATGACGCTGTGACTTT..... 1 19
.....TTGACTTTTATGATATATGTTGA..... 1 22
.....TGACTTTTATGATATATGTTGAC..... 1 22
.....TGACAATTCGTCTTATTCAAAA..... 1 22

>osa-miR1862e_MIMAT0007833_Oryza_sativa_miR1862e
GTATTTCTTCATCCAAAATGAAAAATCTAGTACATATGTGTTGACATATCTGTACTAGATTGTTTATTTGGGACGGAGGAGTATCCAGTAGTAGCAGCACTGTTGAATCATGAAAAAGTGAATTAATG
*****CTAGATTGTTTATTTGGGACGG***** 24
.....ATCCAAAATGAAAAATCTAGTA..... 5 24
.....TACTAGATTGTTTATTTGGGACG..... 1 25
.....ACTAGATTGTTTATTTGG..... 2 19
.....ACTAGATTGTTTATTTGGG..... 2 21
.....ACTAGATTGTTTATTTGGGA..... 2 22
.....ACTAGATTGTTTATTTGGGACG..... 151 24
.....CTAGATTGTTTATTTGGGA..... 1 21
.....CTAGATTGTTTATTTGGGACG..... 5 23
.....CTAGATTGTTTATTTGGGACGG..... 257 24
.....CTAGATTGTTTATTTGGGACGGA..... 1 25
.....TAGATTGTTTATTTGGGAC..... 2 21
.....TAGATTGTTTATTTGGGACGG..... 55 23
.....TAGATTGTTTATTTGGGACGGA..... 1 24
.....AGATTGTTTATTTGGGA..... 1 19
.....AGATTGTTTATTTGGGACG..... 1 21
.....AGATTGTTTATTTGGGACGG..... 23 22
.....AGATTGTTTATTTGGGACGGA..... 70 22
.....AGATTGTTTATTTGGGACGGAG..... 173 24
.....GATTGTTTATTTGGGACGGA..... 7 22
.....GATTGTTTATTTGGGACGGAG..... 9 23
.....GATTGTTTATTTGGGACGGA..... 2 20
.....TTGTTTATTTGGGACGGAG..... 14 21
.....TTGTTTATTTGGGACGGAGG..... 1 22
.....TTGTTTATTTGGGACGGAGGA..... 1 24
.....TTGTTTATTTGGGACGG..... 1 18
.....TTGTTTATTTGGGACGGAG..... 3 20
.....TTGTTTATTTGGGACGGAGG..... 10 21
.....TTGTTTATTTGGGACGGAGGAGT..... 4 24
.....TTTATTTGGGACGGAGGAGTAT..... 1 24
.....TTTATTTGGGACGGAGGAGTA..... 2 22
.....TTTATTTGGGACGGAGGAG..... 1 19
.....TTTATTTGGGACGGAGGAGTAT..... 1 20
.....AGGAGTATCCAGTAGTAGTAC..... 1 23
.....AGTATCCAGTAGTAGTACGAGCAA..... 1 24

>osa-miR1878_MIMAT0007835_Oryza_sativa_miR1878
TGACTTTTGGTCTTATGCTGCTGCACTGTAATGAGATCTTAAAACTACCACTGCAGACTTAATCTGGACACTATAAAAAAATGTGCATGAAAATGCCATATAAATTTAGTAGTTCAGATTGAGTTAGAA
*****ACTTAATCTGGACACTATAAAAA***** 24
.....ACTTAATCTGGACACTATAAAAA..... 3 23
.....ACTTAATCTGGACACTATAAAAA..... 15 24
.....ACTTAATCTGGACACTATAAAAA..... 1 25
.....CTTAATCTGGACACTATAAAAA..... 4 23
.....TAATCTGGACACTATAAAAA..... 1 21
.....ATTGTTAGTGTTCAGATTGAGTTT..... 2 24

>osa-miR1879_MIMAT0007836_Oryza_sativa_miR1879
TGTTGAGGAATAAACATCTTGTCCCTTGCATCTAACTAGATATCTTCAAGCATATGTTGTTGTTAGGGATGAGTGGATGGTTAGTCCATCCAGATTTTGGGATAGGTTGGTCTTATTTCTGTTTGAAGG
*****GTGTTGGTTAGGGATGAGTGG***** 24
.....GTGTTGGTTAGGGATGAGTGG..... 1 23
.....GTGTTGGTTAGGGATGAGTGG..... 24 24
.....TTGGTTAGGGATGAGTGGATG..... 1 24
.....GTTTAGGGATGAGTGGATGG..... 1 22
.....TTTAGGGATGAGTGGATGG..... 1 21
.....TTAGGGATGAGTGGATGG..... 1 20
.....TTAGGGATGAGTGGATGGG..... 7 21
.....TAGGGATGAGTGGATGGG..... 9 20
.....TAGGGATGAGTGGATGGGT..... 11 21
.....AGGGATGAGTGGATGGGT..... 1 20
.....GATGAGTGGATGGGTAGG..... 1 21

>osa-miR1880_MIMAT0007837_Oryza_sativa_miR1880
CGGTGGAGTATGATTTTCTCAGCGGACACGTAAGTTCGCTTGTGAAAATCGATTTTCCAAGCGGCGCACTTAAGCATCCGCTGAAAATTAAGGATTTTCGACGCGGATCGCTTAAGTGGTCCGCTGGATA
*****TTCCAAGCGGCGCACTTAAGCAT***** 24
.....TTCCAAGCGGCGCACTTAAGC..... 2 21
.....TTCCAAGCGGCGCACTTAAGCAT..... 5 23
.....TTCCAAGCGGCGCACTTAAGCAT..... 2 24
.....TTCCAAGCGGCGCACTTAAGCAT..... 1 20
.....TAAGTGGTCCGCTGGATA.....

>osa-miR1881_MIMAT0007838_Oryza_sativa_miR1881
CGACTGGCAGGAGTCAAGCGCAACCAAGTAAAAATCTAATGATGAACAAGCATCAATGTTATTGAGCGTGGTGGTGTGACCTGTGACGTAAGCTTGAGGACGCAAGTTCAGCTCCTCAAAGGAAGATTGTA
*****AAATGTATTGACGCTGGTGGT***** 24
.....ATCAATGTTATTGAGCGTGGT..... 1 23
.....ATCAATGTTATTGAGCGTGGT..... 1 24
.....CAATGTTATTGAGCGTGGTGGT..... 1 24
.....AATGTTATTGAGCGTGGTGG..... 1 21
.....AATGTTATTGAGCGTGGTGGT..... 1 22
.....AATGTTATTGAGCGTGGTGGT..... 7 23
.....AATGTTATTGAGCGTGGTGGT..... 6 24

>osa-miR1812g_MIMAT0007847_Oryza_sativa_miR1812g
TACTATTATATTTTATCTCATAAACAATAAAAAATCTAATATAAAAAAATTAATAAGCGGATGATTAAGTTGGACATGAAACTCATAGTTGACTTAAAAATGGGACGAGGAGTATCATTGGCAGTTGGTGA
*****AAGCGGATGATTAAGTTGGACA***** 24
.....ATAAAAAAATTAATAAGCGGA..... 1 24
.....AAAAAATTAATAAGCGGATG..... 2 23
.....AAAAAATTAATAAGCGGATGA..... 1 24
.....AAAAAATTAATAAGCGGATGA..... 1 22
.....AAATTAATAAGCGGATGATTA..... 1 24
.....AATTAATAAGCGGATGATTA..... 1 24
.....ATTAATAAGCGGATGATTA..... 1 23

```

.....ATTTAAATAAGCGGATGATTA.....	3	24
.....TTAAATAAGCGGATGATTA.....	1	22
.....AAATAAGCGGATGATTAAG.....	2	21
.....AAATAAGCGGATGATTAAGTT.....	1	23
.....AAATAAGCGGATGATTAAGTTG.....	1	24
.....AAATAAGCGGATGATTAAGTTGG.....	1	25
.....AAATAAGCGGATGATTA.....	1	19
.....AAATAAGCGGATGATTAAG.....	1	20
.....AAATAAGCGGATGATTAAGTT.....	2	21
.....AAATAAGCGGATGATTAAGTTG.....	1	22
.....AAATAAGCGGATGATTAAGTTGG.....	48	24
.....ATAAGCGGATGATTAAGTTGG.....	2	23
.....ATAAGCGGATGATTAAGTTGGA.....	15	24
.....TAAGCGGATGATTAAGTTG.....	3	21
.....TAAGCGGATGATTAAGTTGG.....	1	22
.....TAAGCGGATGATTAAGTTGGA.....	2	23
.....TAAGCGGATGATTAAGTTGGAC.....	6	24
.....AAAGCGGATGATTAAGTTGGACA.....	39	24
.....AGCGGATGATTAAGTTGGACA.....	1	23

>osa-miR812h_MIMAT0007848_Oryza_sativa_miR812h

GTTTTATTGAACTTTTATAAATGATTTTTATTGTTATGAGATTATAAAATTTAAATAAGCGGATGATTAAGTTGGACAGAAACTCATGGCTACACTTACAATGAAATGGAGGGTACTACTCAGCTCCTGTTACAG	osa-miR812h	24
*****AAGCGGATGATTAAGTTGGACA*****		
.....ATAAAATTTAAATAAGCGGATG.....	1	23
.....ATAAAATTTAAATAAGCGGATGA.....	7	24
.....ATAAAATTTAAATAAGCGGATGA.....	1	22
.....ATAAAATTTAAATAAGCGGATGATTA.....	1	24
.....AATTTAAATAAGCGGATGATTA.....	1	24
.....ATTAAATAAGCGGATGATTA.....	1	23
.....ATTTAAATAAGCGGATGATTA.....	3	24
.....TTAAATAAGCGGATGATTA.....	1	22
.....AAATAAGCGGATGATTAAG.....	2	21
.....AAATAAGCGGATGATTAAGTT.....	1	23
.....AAATAAGCGGATGATTAAGTTG.....	1	24
.....AAATAAGCGGATGATTAAGTTGG.....	1	25
.....AAATAAGCGGATGATTA.....	1	19
.....ATAAGCGGATGATTAAG.....	1	20
.....ATAAGCGGATGATTAAGTT.....	2	21
.....ATAAGCGGATGATTAAGTTG.....	1	22
.....ATAAGCGGATGATTAAGTTGG.....	48	24
.....ATAAGCGGATGATTAAGTTGG.....	2	23
.....ATAAGCGGATGATTAAGTTGGA.....	15	24
.....TAAGCGGATGATTAAGTTGG.....	3	21
.....TAAGCGGATGATTAAGTTGG.....	1	22
.....TAAGCGGATGATTAAGTTGGA.....	2	23
.....TAAGCGGATGATTAAGTTGGAC.....	6	24
.....AAGCGGATGATTAAGTTGGACA.....	39	24
.....AGCGGATGATTAAGTTGGACA.....	1	23
.....GACGGATGATTAAGTTGGACAG.....	4	24
.....ACGGATGATTAAGTTGGACAG.....	1	23
.....ATGATTAAGTTGGACAG.....	1	19
.....ATGATTAAGTTGGACAGAA.....	1	21
.....ATGATTAAGTTGGACAGAAAC.....	25	24
.....TGATTAAGTTGGACAGAAA.....	1	21
.....TGATTAAGTTGGACAGAAA.....	1	22
.....TGATTAAGTTGGACAGAAA.....	1	23
.....GATTAAGTTGGACAGAA.....	1	19
.....TTAAAGTTGGACAGAAAC.....	2	20

>osa-miR812i_MIMAT0007849_Oryza_sativa_miR812i

AAACATGAATATTACTTTATGATGACTTATATTTAGATTTCTAAAAAAATAAATAAGCGGATGATTAAGTTGGACAGAAACTCAGGGCTCGCTTATTTGGGAATGAGGGAGTACCGGACTAATATCAAC	osa-miR812i	24
*****AAGCGGATGATTAAGTTGGACA*****		
.....AAAAAATAAATAAGCGGATG.....	1	24
.....AAATAAATAAGCGGATGATTA.....	1	24
.....AAATAAAGCGGATGATTAAG.....	2	21
.....AAATAAAGCGGATGATTAAGTT.....	1	23
.....AAATAAAGCGGATGATTAAGTTG.....	1	24
.....AAATAAAGCGGATGATTAAGTTGG.....	1	25
.....AATAAGCGGATGATTA.....	1	19
.....AATAAGCGGATGATTAAG.....	1	20
.....AATAAGCGGATGATTAAGTT.....	2	21
.....AATAAGCGGATGATTAAGTTG.....	1	22
.....AATAAGCGGATGATTAAGTTGG.....	48	24
.....ATAAGCGGATGATTAAGTTGG.....	2	23
.....ATAAGCGGATGATTAAGTTGGA.....	15	24
.....TAAGCGGATGATTAAGTTGG.....	3	21
.....TAAGCGGATGATTAAGTTGG.....	1	22
.....TAAGCGGATGATTAAGTTGGA.....	2	23
.....TAAGCGGATGATTAAGTTGGAC.....	6	24
.....AAGCGGATGATTAAGTTGGACA.....	39	24
.....AGCGGATGATTAAGTTGGACA.....	1	23
.....GACGGATGATTAAGTTGGACAG.....	4	24
.....ACGGATGATTAAGTTGGACAG.....	1	23
.....ATGATTAAGTTGGACAG.....	1	19
.....ATGATTAAGTTGGACAGAA.....	1	21
.....ATGATTAAGTTGGACAGAAAC.....	25	24
.....TGATTAAGTTGGACAGAAA.....	1	21
.....TGATTAAGTTGGACAGAAA.....	1	22
.....TGATTAAGTTGGACAGAAA.....	1	23
.....GATTAAGTTGGACAGAA.....	1	19
.....TTAAAGTTGGACAGAAAC.....	2	20
.....AAAGTTGGACAGAAACTCAGGG.....	1	24

>osa-miR812j_MIMAT0007850_Oryza_sativa_miR812j

ACTATTGATGTTTATAAATTAACAATAAAATACTAATCATACAAAAATTTCAAATAAGCGGATGATTAAGTTGGACAGAAACTCATGGCTCGCTTATTTGTGACGAGAGACTACTTGGAAAGATCAGCTA	osa-miR812j	24
*****AAGCGGATGATTAAGTTGGACA*****		
.....AATAACAATAAAATACTAATCAT.....	2	24
.....AAAAATTTCAAATAAGCGGA.....	1	21
.....AAAAATTTCAAATAAGCGGATG.....	1	23
.....AAAAATTTCAAATAAGCGGATGA.....	5	24
.....AAAAATTTCAAATAAGCGGA.....	1	20
.....AAATTTCAAATAAGCGGATG.....	1	21
.....AAATTTCAAATAAGCGGATGA.....	1	22
.....AAATTTCAAATAAGCGGATGATT.....	1	24
.....AATTTCAAATAAGCGGATGATTA.....	1	24
.....ATTTCAAATAAGCGGATGATTA.....	1	24
.....TCAAATAAGCGGATGAT.....	1	18
.....CAAATAAGCGGATGATTAAG.....	1	22
.....AAATAAGCGGATGATTAAG.....	2	21

.....AAATAAGCGGATGATTAAGTT.....	1	23
.....AAATAAGCGGATGATTAAGTTG.....	1	24
.....AAATAAGCGGATGATTAAGTTGG.....	1	25
.....AATAAGCGGATGATTAAG.....	1	19
.....AATAAGCGGATGATTAAG.....	1	20
.....AATAAGCGGATGATTAAGTT.....	2	21
.....AATAAGCGGATGATTAAGTT.....	1	22
.....AATAAGCGGATGATTAAGTTGG.....	48	24
.....ATAAGCGGATGATTAAGTTGG.....	2	23
.....ATAAGCGGATGATTAAGTTGGA.....	15	24
.....TAAGCGGATGATTAAGTTG.....	3	21
.....TAAGCGGATGATTAAGTTGG.....	1	22
.....TAAGCGGATGATTAAGTTGGA.....	2	23
.....TAAGCGGATGATTAAGTTGGAC.....	6	24
.....AAGCGGATGATTAAGTTGGACA.....	39	24
.....AGCGGATGATTAAGTTGGACA.....	1	23
.....GACGGATGATTAAGTTGGACACG.....	4	24
.....ACGGATGATTAAGTTGGACACG.....	1	23
.....ACGGATGATTAAGTTGGACACGG.....	4	24
.....CGGATGATTAAGTTGGACACGGA.....	1	24
.....GGATGATTAAGTTGGACACGGAA.....	3	24
.....GATGATTAAGTTGGACACGGAA.....	1	23
.....GATGATTAAGTTGGACACGGAAA.....	23	24
.....ATGATTAAGTTGGACACG.....	1	19
.....ATGATTAAGTTGGACACGGAAAC.....	7	24
.....TGATTAAGTTGGACACGGAAAC.....	1	23
.....GATTAAGTTGGACACGGAAAC.....	1	22
.....ATTAAGTTGGACACGGAA.....	1	18
.....ATTAAGTTGGACACGGAAAC.....	2	21
.....ATTAAGTTGGACACGGAAACTCA.....	1	24
.....TTAAAGTTGGACACGGAAA.....	1	19
.....AAAGTTGGACACGGAAA.....	1	18
.....AGTTGGACACGGAACTCATGGCT.....	1	24
.....ACGGAACTCATGGCTGCGTTTAT.....	1	24
.....ATTTGTGACGGAGAGAGT.....	1	19

>osa-miR1318_MIMAT0009135_Oryza_sativa_miR1318		
TCTGAGCTCTGACAGATGAGGAGGATGTGCTTCTTGGGGGTTGGCCCTGTGATCAGGAGAGTACACGACATCGCCGAATTCCTTGGTCTGTGTCATGATGAATGATGGCTTTGATGCAAG		
.....*TCAGGAGAGTACACCGAC*.....	osa-miR1318	20
.....CTGTGATCAGGAGAGTACAC.....	2	21
.....TGATCAGGAGAGTACAC.....	3	21
.....GATCAGGAGAGTACACCGA.....	32	21
.....GATCAGGAGAGTACACCGAC.....	6	22
.....GATCAGGAGAGTACACGACA.....	33	23
.....ATCAGGAGAGTACACCC.....	16	18
.....ATCAGGAGAGTACACCG.....	14	19
.....ATCAGGAGAGTACACCGA.....	99	20
.....ATCAGGAGAGTACACCGAC.....	9315	21
.....ATCAGGAGAGTACACCGACA.....	39380	22
.....ATCAGGAGAGTACACCGACAT.....	201	23
.....ATCAGGAGAGTACACCGACATC.....	16	24
.....TCAGGAGAGTACACCG.....	9	18
.....TCAGGAGAGTACACCGA.....	236	19
.....TCAGGAGAGTACACCGAC.....	7005	20
.....TCAGGAGAGTACACCGACA.....	3681	21
.....TCAGGAGAGTACACCGACAT.....	13	22
.....TCAGGAGAGTACACCGACATCG.....	1	24
.....CAGGAGAGTACACCGA.....	2	18
.....CAGGAGAGTACACCGAC.....	102	19
.....CAGGAGAGTACACCGACA.....	56	20
.....CAGGAGAGTACACCGACAT.....	1	21
.....AGGAGAGTACACCGAC.....	206	18
.....AGGAGAGTACACCGACA.....	274	19
.....AGGAGAGTACACCGACAT.....	1	20
.....GAGATGACACGACATCGCCG.....	4	21
.....GAGATGACACGACATCGCCGAA.....	1	24
.....AGATGACACGACATCGCCGG.....	1	21
.....GATGACACGACATCGCCGG.....	1	20
.....GAATTGATGTCGTTGATG.....	1	21

>osa-miR1319_MIMAT0009136_Oryza_sativa_miR1319		
TAGGTGTGGTTCTAAAGAAAAATCGACACTTATACTATGGGTGTCGGTTTTAAGAAAAACCGGCATCTGTAATATTATAGGTGTCGGTAAATAAAAACCGAGACCTATAATATATAAGTCCCGTTTTTTAAAA		
.....*AACCGGCATCTGTAATATTATA*.....	osa-miR1319	24
.....AAGAAAAACCGGCATCTGTAATA.....	1	24
.....AAAAACCGGCATCTGTAAT.....	1	20
.....CTGTAATATTATAGGTGTCGGT.....	1	24
.....TAATATATTATAGGTGTCGGTTAA.....	2	24
.....AATATATTATAGGTGTCGGTT.....	1	21
.....AATATATTATAGGTGTCGGTTAAT.....	1	24
.....ATATTATAGGTGTCGGTTAAT.....	1	21
.....ATATTATAGGTGTCGGTTAATTA.....	3	24
.....ATTATAGGTGTCGGTTAATTAATA.....	3	24
.....TTATAGGTGTCGGTTAATTA.....	1	21

>osa-miR1320_MIMAT0009137_Oryza_sativa_miR1320		
CCGTTTTCGATGCCCGCGCTTTCAITTCCTCTTAAGATCAAGTTAGCCCTACTTGGACGGAGAAATTTATAGGATTTTGGCGGAATTTACAGATTCCTGAAAATTCATTCGTTCAATGTAGCCCTAT		
.....*TGGACGGAGAAATTTATAG*.....	osa-miR1320	21
.....GTTAGCCCTACTTGGACCG.....	1	21
.....GCCTACTTGGACGGAGAA.....	3	21
.....ACTTGGACGGAGAAATTT.....	1	21
.....ACTTGGACGGAGAAATTTATA.....	1	24
.....TGGACGGAGAAATTTA.....	4	18
.....TGGACGGAGAAATTTAT.....	10	19
.....TGGACGGAGAAATTTATA.....	15	20
.....TGGACGGAGAAATTTATAG.....	433	21
.....TGGACGGAGAAATTTATAGG.....	206	22
.....TGGACGGAGAAATTTATAGGA.....	4	23
.....TGGACGGAGAAATTTATAGGAT.....	3	24
.....GGAACGGAGAAATTTATAG.....	2	20
.....GGAACGGAGAAATTTATAGG.....	52	21
.....GGAACGGAGAAATTTATAGG.....	2	20
.....GGAACGGAGAAATTTATAGGA.....	3	21
.....AACGGAGAAATTTATAG.....	1	18
.....ATTCCTGAAAATTCATTCGT.....	2	21
.....TGTAATAATTCATTCGTTCC.....	1	18
.....TGTAATAATTCATTCGTTCC.....	2	19
.....TGTAATAATTCATTCGTTCCA.....	1	20
.....TGTAATAATTCATTCGTTCCAA.....	51	21
.....TGTAATAATTCATTCGTTCCAAT.....	1	22

```

.....GTAAMATTCATTGTTCCAA..... 2 20
.....GTAAMATTCATTGTTCCAAT..... 5 21
.....TAAAMATTCATTGTTCCAAT..... 1 20

```

```

>osa-miR1846e_MIMAT0010042_Oryza_sativa_miR1846e
TGCCGTGCGCCGATCGTTGTCTGCGGGTCCGATCTCTGCACTCGCGCCGATCCGCAACGAGGAGGCGGGACACCCGGATCCGGTACTCGGCTCTCCGCGGAGATCCGGCCACTCTGAGGCAGGGGGT
*****CAACGAGGAGCCGGGACCA*****
.....ATCCGCCAACGAGGAGCCGG..... 1 21
.....AACGAGGAGCCGGGACCC..... 1 18
.....AACGAGGAGCCGGGACCA..... 5 19
.....AACGAGGAGCCGGGACCA..... 7 20
.....AACGAGGAGCCGGGACCA..... 6 21
.....AACGAGGAGCCGGGACCCG..... 199 22
.....AACGAGGAGCCGGGACCCGG..... 38 23
.....ACGAGGAGCCGGGACCA..... 3 19
.....ACGAGGAGCCGGGACCA..... 1 20
.....ACGAGGAGCCGGGACCCG..... 59 21
.....ACGAGGAGCCGGGACCCGG..... 4 22
.....ACGAGGAGCCGGGACCCGGA..... 2 23
.....CGAGGAGCCGGGACCCGG..... 3 20
.....GAGGAGCCGGGACCCG..... 1 19
.....AGGAGCCGGGACCCG..... 1 18
.....CGGTACTCCGGCTCTCCG..... 1 22
.....AGATCCGGCCACTCTGAGGCAG..... 1 23

```

```

>osa-miR2098-3p_MIMAT0010061_Oryza_sativa_miR2098-3p
CGGCACATCAACCAACTCGTCTGTGTCATCCCGTGGAGGACCGGATGAGGATTAACGGTTTGTCAAGCGGAGTCACTTAATGAGGCCAAGTAGGAGTCTCACAGCTCCGCGAGCTCCCTGTCGGT
*****CGGTTTGTCAAGCGGAGTG*****
.....GAGGATTAACGGTTTGTCAAGCGG..... 1 24

```

```

>osa-miR2121a_MIMAT0011180_Oryza_sativa_miR2121a
CAGCGCGGCTTAGGCTGTGTTCCATCTACAGATGGAACTATTCCCTCGACGAAAACGGAGCGTCCATTAGCGGTGATTAATAGTATTAGTAATTTTTTAAAAAGGATTAATGTGATATTTTAAAG
*****AAAAAGGAGCGTCCATTAGCGCG*****
.....TGACGAAAACGGAGCGTCCAT..... 6 24
.....GCACGAAAACGGAGCGTCCATT..... 1 24
.....CACGAAAACGGAGCGGT..... 1 18
.....CACGAAAACGGAGCGTCCATT..... 2 23
.....CACGAAAACGGAGCGTCCATT..... 1 24
.....ACGAAAACGGAGCGTCCA..... 1 20
.....ACGAAAACGGAGCGTCCAT..... 8 21
.....ACGAAAACGGAGCGTCCATT..... 5 22
.....ACGAAAACGGAGCGTCCATT..... 5 23
.....ACGAAAACGGAGCGTCCATTAG..... 5 24
.....CGAAAACGGAGCGTCCAT..... 1 20
.....CGAAAACGGAGCGTCCATTAGC..... 1 24
.....GAAAACGGAGCGTCCATTAGC..... 1 23
.....GAAAACGGAGCGTCCATTAGCGC..... 5 24
.....AAAACGGAGCGTCCATTAGCG..... 1 22
.....AAAACGGAGCGTCCATTAGCGC..... 4 23
.....AAAACGGAGCGTCCATTAGCGCG..... 14 24
.....AAAACGGAGCGTCCATTAGCGCG..... 1 23
.....ACGGAGCGTCCATTAGCGCGTGA..... 1 24
.....AGGGTCCATTAGCGCGTGAATAA..... 2 24
.....ATTAGCGCGTGAATAAATAGTAT..... 1 24
.....AGCGCGTGAATAAATAGTATTA..... 1 23
.....ATTTTTTTTTAAAAATGATTA..... 1 23

```

```

>osa-miR2121b_MIMAT0011181_Oryza_sativa_miR2121b
AGGATGTGTGTGAGATGCATTTATGTGCTGGAACTATCCCTCGACGAAAACGGAGCGTCCATTAGCGGTGATTAATAGTATTAGATATTTTTTAAAAAGCACTTAATATAGAACTTTTGA
*****AAAAAGGAGCGTCCATTAGCGCG*****
.....GCACGAAAACGGAGCGTCCATT..... 1 24
.....CACGAAAACGGAGCGGT..... 1 18
.....CACGAAAACGGAGCGTCCATT..... 2 23
.....CACGAAAACGGAGCGTCCATT..... 1 24
.....ACGAAAACGGAGCGTCCA..... 1 20
.....ACGAAAACGGAGCGTCCAT..... 8 21
.....ACGAAAACGGAGCGTCCATT..... 5 22
.....ACGAAAACGGAGCGTCCATT..... 5 23
.....ACGAAAACGGAGCGTCCATTAG..... 5 24
.....CGAAAACGGAGCGTCCAT..... 1 20
.....CGAAAACGGAGCGTCCATTAGC..... 1 24
.....GAAAACGGAGCGTCCATTAGC..... 1 23
.....GAAAACGGAGCGTCCATTAGCGC..... 5 24
.....AAAACGGAGCGTCCATTAGCG..... 1 22
.....AAAACGGAGCGTCCATTAGCGC..... 4 23
.....AAAACGGAGCGTCCATTAGCGCG..... 14 24
.....AAAACGGAGCGTCCATTAGCGCG..... 1 23
.....ACGGAGCGTCCATTAGCGCGTGA..... 1 24
.....AGGGTCCATTAGCGCGTGAATAA..... 2 24
.....ATTAGCGCGTGAATAAATAGTAT..... 1 24
.....AGCGCGTGAATAAATAGTATTA..... 1 23

```

```

>osa-miR2123a_MIMAT0011183_Oryza_sativa_miR2123a
GTATTTTCACTGACACATCTAGTTTACATATTACAGAGCAAGCGTCAAGATGTACTAAAAAGTCAACGGTGTCAAACTTTTGAACGAGGAGTATATCGTCTGACGCGGATCGTGCATATGGATTTTA
*****AAAAAGTCAACGGTGTCAAACTTTTGAACGAGGAGTATATCGTCTGACGCGGATCGTGCATATGGATTTTA*****
.....AGACATGTACTAAAAAGTCAACGG..... 2 24
.....ACATGTACTAAAAAGTCAACGGT..... 1 24
.....TGACTAAAAAGTCAACGG..... 1 18
.....TGACTAAAAAGTCAACGGTGT..... 1 23
.....GTACTAAAAAGTCAACGGTGT..... 1 21
.....TACTAAAAAGTCAACGGTGT..... 1 20
.....TACTAAAAAGTCAACGGTGT..... 4 21
.....TACTAAAAAGTCAACGGTGTCA..... 1 22
.....ACTAAAAAGTCAACGGTGTCA..... 1 20
.....ACTAAAAAGTCAACGGTGTCA..... 3 21
.....ACTAAAAAGTCAACGGTGTCAA..... 5 22
.....ACTAAAAAGTCAACGGTGTCAAAC..... 30 24
.....CTAAAAAGTCAACGGTGTCAA..... 5 21
.....CTAAAAAGTCAACGGTGTCAA..... 2 22
.....TAAAAAGTCAACGGTGTCAA..... 7 21
.....TAAAAAGTCAACGGTGTCAAACAT..... 8 24
.....AAAAAGTCAACGGTGTCAA..... 1 20
.....AAAAAGTCAACGGTGTCAAAC..... 3 21
.....AAAAAGTCAACGGTGTCAAACA..... 5 22
.....AAAAAGTCAACGGTGTCAAACAT..... 7 23
.....AAAAAGTCAACGGTGTCAAACATT..... 120 24
.....AAAAAGTCAACGGTGTCAAAC..... 1 20

```

.....AAAAGTCAACGGTGTCAAAACA.....	4	21
.....AAAAGTCAACGGTGTCAAAACATT.....	4	23
.....AAAAGTCAACGGTGTCAAAACATT.....	22	24
.....AAAAGTCAACGGTGTCAAAAC.....	1	18
.....AAAAGTCAACGGTGTCAAAAC.....	2	19
.....AAAAGTCAACGGTGTCAAAACA.....	2	20
.....AAAAGTCAACGGTGTCAAAACAT.....	8	21
.....AAAAGTCAACGGTGTCAAAACATT.....	4	22
.....AAAAGTCAACGGTGTCAAAACATT.....	14	23
.....AAAAGTCAACGGTGTCAAAACATT.....	4	24
.....AAGTCAACGGTGTCAAAACATT.....	3	20
.....AAGTCAACGGTGTCAAAACATT.....	8	21
.....AAGTCAACGGTGTCAAAACATT.....	1	22
.....AAGTCAACGGTGTCAAAACATT.....	3	23
.....AAGTCAACGGTGTCAAAACATT.....	1	24
.....AAGTCAACGGTGTCAAAACATT.....	3	24
.....AAGTCAACGGTGTCAAAACATT.....	1	26
.....AAGTCAACGGTGTCAAAACATT.....	6	24
.....AAGTCAACGGTGTCAAAACATT.....	2	21
.....AAGTCAACGGTGTCAAAACATT.....	1	22
.....AAGTCAACGGTGTCAAAACATT.....	2	21
.....AAGTCAACGGTGTCAAAACATT.....	1	22
.....AAGTCAACGGTGTCAAAACATT.....	5	24
.....AAGTCAACGGTGTCAAAACATT.....	5	24
.....AAGTCAACGGTGTCAAAACATT.....	15	24
.....AAGTCAACGGTGTCAAAACATT.....	1	24
.....AAGTCAACGGTGTCAAAACATT.....	6	21
.....AAGTCAACGGTGTCAAAACATT.....	2	24
.....AAGTCAACGGTGTCAAAACATT.....	1	21
.....AAGTCAACGGTGTCAAAACATT.....	1	24
.....AAGTCAACGGTGTCAAAACATT.....	9	24
.....AAGTCAACGGTGTCAAAACATT.....	17	21
.....AAGTCAACGGTGTCAAAACATT.....	1	24
.....AAGTCAACGGTGTCAAAACATT.....	1	22
.....AAGTCAACGGTGTCAAAACATT.....	5	23
.....AAGTCAACGGTGTCAAAACATT.....	4	24
.....AAGTCAACGGTGTCAAAACATT.....	2	19
.....AAGTCAACGGTGTCAAAACATT.....	6	21
.....AAGTCAACGGTGTCAAAACATT.....	3	24
.....AAGTCAACGGTGTCAAAACATT.....	1	19
.....AAGTCAACGGTGTCAAAACATT.....	1	21
.....AAGTCAACGGTGTCAAAACATT.....	2	23
.....AAGTCAACGGTGTCAAAACATT.....	1	24
.....AAGTCAACGGTGTCAAAACATT.....	1	22
.....AAGTCAACGGTGTCAAAACATT.....	2	23
.....AAGTCAACGGTGTCAAAACATT.....	1	24
.....AAGTCAACGGTGTCAAAACATT.....	1	21
.....AAGTCAACGGTGTCAAAACATT.....	1	18
.....AAGTCAACGGTGTCAAAACATT.....	3	21

>osa-miR2123b_MIMAT0011184_Oryza_sativa_miR2123b
TATGAAAAGAAATAAATAATCTTAAATTTTTGAATAAGACGAATGGTCAAAACAGTCTAAAAAGTCAACGGTGTCAAAACATTGTAACGGAGGAGTAGCATGATAGCAAGCAACAGTAGCTCACCAGCGAA
.....TAAAAAGTCAACGGTGTCAAAAC.....

.....ATAATTAATCTTAAATTTTTGAATA.....	1	24
.....TACTTAAATTTTTGAATAAGA.....	1	22
.....TACTTAAATTTTTGAATAAGACG.....	1	24
.....ACTTAAATTTTTGAATAAGACGA.....	9	24
.....CTTAAATTTTTGAATAAGACGA.....	1	23
.....TTAAATTTTTGAATAAGACGAA.....	1	23
.....TTAAATTTTTGAATAAGACGAAT.....	1	24
.....TAAATTTTTGAATAAGACGA.....	9	21
.....TAAATTTTTGAATAAGACGA.....	5	22
.....TAAATTTTTGAATAAGACGAAT.....	17	23
.....TAAATTTTTGAATAAGACGAATG.....	3	24
.....AAATTTTTGAATAAGACGA.....	1	20
.....AAATTTTTGAATAAGACGAA.....	3	21
.....AAATTTTTGAATAAGACGAAT.....	1	22
.....AAATTTTTGAATAAGACGAATG.....	23	23
.....AAATTTTTGAATAAGACGAATGG.....	103	24
.....AAATTTTTGAATAAGACGAATGGT.....	2	25
.....AAATTTTTGAATAAGACGAA.....	1	20
.....AAATTTTTGAATAAGACGAATG.....	1	22
.....AAATTTTTGAATAAGACGAATGG.....	9	23
.....AAATTTTTGAATAAGACGAATGGT.....	9	24
.....AAATTTTTGAATAAGACGAATGGTC.....	1	25
.....AATTTTTGAATAAGACGAATG.....	1	21
.....AATTTTTGAATAAGACGAATGGT.....	1	23
.....TTTTTGAATAAGACGAAT.....	1	18
.....TTTTTGAATAAGACGAATG.....	2	19
.....TTTTTGAATAAGACGAATGG.....	3	20
.....TTTTTGAATAAGACGAATGGT.....	13	21
.....TTTTTGAATAAGACGAATGGTCAA.....	5	24
.....TTTTTGAATAAGACGAATGG.....	1	19
.....TTTTTGAATAAGACGAATGGT.....	1	20
.....TTTTTGAATAAGACGAATGGTCAA.....	2	23
.....TTTTTGAATAAGACGAATGGTCAA.....	2	24
.....TTTTTGAATAAGACGAATGGTCA.....	1	20
.....TTTTTGAATAAGACGAATGGTCA.....	48	21
.....TTTTTGAATAAGACGAATGGTCAA.....	4	22
.....TTTTTGAATAAGACGAATGGTCAA.....	1	23
.....TTTTTGAATAAGACGAATGGTCAAAC.....	4	24
.....TTGAATAAGACGAATGGT.....	1	18
.....TTGAATAAGACGAATGGTCA.....	1	20
.....TTGAATAAGACGAATGGTCAA.....	10	21
.....TTGAATAAGACGAATGGTCAA.....	2	22
.....TTGAATAAGACGAATGGTCAAACA.....	8	24
.....TGAATAAGACGAATGGTCAA.....	1	21
.....TGAATAAGACGAATGGTCAAACA.....	9	23
.....TGAATAAGACGAATGGTCAAACAC.....	8	24
.....AATAAGACGAATGGTCAA.....	1	19
.....AATAAGACGAATGGTCAAACA.....	28	21
.....ATAAGACGAATGGTCAA.....	1	18
.....ATAAGACGAATGGTCAAACA.....	13	20
.....ATAAGACGAATGGTCAAACAC.....	1	21
.....ATAAGACGAATGGTCAAACACG.....	1	22
.....TAAGACGAATGGTCAAACA.....	1	19
.....ATGGTCAAACAGTCTCTAA.....	1	20
.....AAACAGTCTCTAAAAAGTCAACGG.....	2	24
.....AACAGTCTCTAAAAAGTCAACGGT.....	1	24
.....ACAGTCTCTAAAAAGTCAACGGT.....	1	21
.....CTAAAAAGTCAACGGTGTCAAA.....	5	24

.....CTAAAAAGTCAACGGTGTCAAA.....	2	22
.....TAAAAAGTCAACGGTGTCAAA.....	7	21
.....TAAAAAGTCAACGGTGTCAAA.....	8	24
.....AAAAAGTCAACGGTGTCAAA.....	1	20
.....AAAAAGTCAACGGTGTCAAA.....	3	21
.....AAAAAGTCAACGGTGTCAAA.....	5	22
.....AAAAAGTCAACGGTGTCAAA.....	7	23
.....AAAAAGTCAACGGTGTCAAA.....	120	24
.....AAAAAGTCAACGGTGTCAAA.....	1	20
.....AAAAAGTCAACGGTGTCAAA.....	4	21
.....AAAAAGTCAACGGTGTCAAA.....	4	23
.....AAAAAGTCAACGGTGTCAAA.....	22	24
.....AAAAAGTCAACGGTGTCAAA.....	1	18
.....AAAAAGTCAACGGTGTCAAA.....	2	19
.....AAAAAGTCAACGGTGTCAAA.....	2	20
.....AAAAAGTCAACGGTGTCAAA.....	8	21
.....AAAAAGTCAACGGTGTCAAA.....	4	22
.....AAAAAGTCAACGGTGTCAAA.....	14	23
.....AAAAAGTCAACGGTGTCAAA.....	4	24
.....AAAAAGTCAACGGTGTCAAA.....	3	20
.....AAAAAGTCAACGGTGTCAAA.....	8	21
.....AAAAAGTCAACGGTGTCAAA.....	1	22
.....AAAAAGTCAACGGTGTCAAA.....	3	23
.....AAAAAGTCAACGGTGTCAAA.....	1	18
.....AAAAAGTCAACGGTGTCAAA.....	1	24

>osa-miR2123c_MIMAT0011185_Oryza_sativa_miR2123c
TTGACACTGTTGACTTTTAGCACATGTTGACCATTCGCTTATTAAAAAACACGCTACTAAAAAGTCAACGGTGTCAAACTTTTGAACGGAGGATATAAGTTTGGATATCATTGAACACCTCAAAAAATTC

.....TAAAAAGTCAACGGTGTCAAA.....	osa-miR2123c	22
.....GACACTGTTGACTTTTAGCACAT.....	1	24
.....ACACTGTTGACTTTTAGCACATG.....	1	24
.....GTTGACTTTTAGCACATGTTG.....	1	23
.....GTTGACTTTTAGCACATGTTGA.....	5	24
.....TTGACTTTTAGCACATGTT.....	2	19
.....TTGACTTTTAGCACATGTT.....	2	20
.....TTGACTTTTAGCACATGTT.....	7	21
.....TTGACTTTTAGCACATGTTG.....	1	22
.....TTGACTTTTAGCACATGTTGA.....	5	23
.....TTGACTTTTAGCACATGTTGAC.....	19	24
.....TGACTTTTAGCACATGTT.....	1	18
.....TGACTTTTAGCACATGTT.....	1	20
.....TGACTTTTAGCACATGTTG.....	1	21
.....TGACTTTTAGCACATGTTGA.....	2	22
.....TGACTTTTAGCACATGTTGAC.....	28	23
.....TGACTTTTAGCACATGTTGACC.....	10	24
.....GACTTTTAGCACATGTTG.....	1	20
.....GACTTTTAGCACATGTTGA.....	1	21
.....GACTTTTAGCACATGTTGAC.....	9	22
.....GACTTTTAGCACATGTTGACCA.....	1	24
.....ACTTTTAGCACATGTTGAC.....	2	21
.....ACTTTTAGCACATGTTGACC.....	1	22
.....TTTTTAGCACATGTTGAC.....	1	19
.....TTTTTAGCACATGTTGACCTTC.....	1	24
.....CACATGTTGACCATTCGCTTAT.....	1	24
.....ACATGTTGACCATTCGCTTAT.....	2	21
.....ATGTTGACCATTCGCTTAT.....	3	21
.....ATGTTGACCATTCGCTTAT.....	1	22
.....ATGTTGACCATTCGCTTATTA.....	1	24
.....TGTGTTGACCATTCGCTTAT.....	2	21
.....TGTGTTGACCATTCGCTTATTA.....	1	23
.....TGTGTTGACCATTCGCTTATTA.....	3	24
.....AACAGTACTAAAAAGTCAACGG.....	1	22
.....AACAGTACTAAAAAGTCAACGG.....	15	24
.....AACAGTACTAAAAAGTCAACGG.....	2	22
.....AACAGTACTAAAAAGTCAACGG.....	2	24
.....AACAGTACTAAAAAGTCAACGG.....	1	24
.....AACAGTACTAAAAAGTCAACGG.....	1	22
.....AACAGTACTAAAAAGTCAACGG.....	1	24
.....AACAGTACTAAAAAGTCAACGG.....	1	21
.....TACTAAAAAGTCAACGGTGT.....	1	20
.....TACTAAAAAGTCAACGGTGT.....	4	21
.....TACTAAAAAGTCAACGGTGTCA.....	1	22
.....ACTAAAAAGTCAACGGTGTCA.....	1	20
.....ACTAAAAAGTCAACGGTGTCA.....	3	21
.....ACTAAAAAGTCAACGGTGTCAA.....	5	22
.....ACTAAAAAGTCAACGGTGTCAA.....	30	24
.....CTAAAAAGTCAACGGTGTCAA.....	5	21
.....CTAAAAAGTCAACGGTGTCAA.....	2	22
.....TAAAAAGTCAACGGTGTCAA.....	7	21
.....TAAAAAGTCAACGGTGTCAA.....	8	24
.....AAAAAGTCAACGGTGTCAA.....	1	20
.....AAAAAGTCAACGGTGTCAA.....	3	21
.....AAAAAGTCAACGGTGTCAA.....	5	22
.....AAAAAGTCAACGGTGTCAA.....	7	23
.....AAAAAGTCAACGGTGTCAA.....	7	22
.....AAAAAGTCAACGGTGTCAA.....	120	24
.....AAAAAGTCAACGGTGTCAA.....	1	20
.....AAAAAGTCAACGGTGTCAA.....	4	21
.....AAAAAGTCAACGGTGTCAA.....	4	23
.....AAAAAGTCAACGGTGTCAA.....	4	24
.....AAAAAGTCAACGGTGTCAA.....	22	24
.....AAAAAGTCAACGGTGTCAA.....	1	18
.....AAAAAGTCAACGGTGTCAA.....	2	19
.....AAAAAGTCAACGGTGTCAA.....	2	20
.....AAAAAGTCAACGGTGTCAA.....	8	21
.....AAAAAGTCAACGGTGTCAA.....	4	22
.....AAAAAGTCAACGGTGTCAA.....	14	23
.....AAAAAGTCAACGGTGTCAA.....	4	24
.....AAAAAGTCAACGGTGTCAA.....	3	20
.....AAAAAGTCAACGGTGTCAA.....	8	21
.....AAAAAGTCAACGGTGTCAA.....	1	22
.....AAAAAGTCAACGGTGTCAA.....	3	23
.....AAAAAGTCAACGGTGTCAA.....	1	24
.....AGTCAACGGTGTCAA.....	3	24
.....AGTCAACGGTGTCAA.....	1	26
.....GTCAACGGTGTCAA.....	6	24
.....TCAACGGTGTCAA.....	2	21
.....CAACGGTGTCAA.....	1	22
.....AACGGTGTCAA.....	2	21
.....AACGGTGTCAA.....	1	22
.....AACGGTGTCAA.....	5	24
.....ACGGTGTCAA.....	5	24
.....GGTGTCAA.....	15	24

```

.....GTGCAAACTTTTGAACGGAGG..... 1 24
.....TGCAAACTTTTGAACGGA..... 6 21
.....TGCAAACTTTTGAACGGAGG..... 2 24
.....GTCAAACTTTTGAACGGAG..... 1 21
.....GTCAAACTTTTGAACGGAGG..... 1 23
.....GTCAAACTTTTGAACGGAGGA..... 9 24
.....TCAAACTTTTGAACGGAGG..... 17 21
.....TCAAACTTTTGAACGGAGGAG..... 1 24
.....CAAACTTTTGAACGGAGGA..... 1 22
.....CAAACTTTTGAACGGAGGAG..... 5 23
.....CAAACTTTTGAACGGAGGAGT..... 4 24
.....AAACTTTTGAACGGAGG..... 2 19
.....AAACTTTTGAACGGAGGA..... 6 21
.....AAACTTTTGAACGGAGGAGTA..... 3 24
.....AACATTTTGAACGGAGG..... 1 19
.....AACATTTTGAACGGAGGAG..... 1 21
.....AACATTTTGAACGGAGGAGTA..... 2 23
.....AACATTTTGAACGGAGGAGTAT..... 1 24
.....ACATTTTGAACGGAGGAGTA..... 1 22
.....ACATTTTGAACGGAGGAGTAT..... 2 23
.....ACATTTTGAACGGAGGAGTATA..... 1 24
.....ATTTTGAACGGAGGAGTAT..... 1 21
.....TTTGAACGGAGGAGTAT..... 1 18
.....TTTGAACGGAGGAGTATA..... 3 21
.....TTTGAACGGAGGAGTATAA..... 1 21

```

```

>osa-miR2124a_MIMAT0011186_Oryza_sativa_miR2124a
TTTGTCTCGCAGTTTACAGCGGAATCTGTAATTTGTTTGTATTAGTCTACGTTAACTTTAAATGTGTGCGGTATATTTAAAAAATGGCACACAACTAAACACGCCAGTCTTTTATGATGTTATGATGATG
*****ACTTTAAATGTGTGCGGTATATTT*****

```

```

osa-miR2124a 24
1 21
1 24
1 21
1 19
1 24
1 23
1 23
1 21
1 24
1 23
1 24
1 23
1 24
1 24
1 21
1 18
1 21
1 21

```

```

.TTGTCTCGCAGTTTACAGCGG.....
.TTGTCTCGCAGTTTACAGCGGAA.....
.GTCTCGCAGTTTACAGCGGA.....
.CTCTCGCAGTTTACAGCGGA.....
.TCGCAGTTTACAGCGGAATCTGT.....
.CGCAGTTTACAGCGGAATCTGT.....
.GAATCTGTAATTTGTTTGTAT.....
.AATCTGTAATTTGTTTGTAT.....
.ATCTGTAATTTGTTTGTATTAG.....
.TCTGTAATTTGTTTGTATTAG.....
.....GTAATTTGTTTGTATTAGTCTA.....
.....AATTTGTTTGTATTAGTCTACG.....
.....TTTGTATTAGTCTACGTTA.....
.....ATTAGTCTACGTTAACTTTAA.....
.....ATTAGTCTACGTTAACTTTAAA.....
.....AATCTTTAAATGTGTGCGGTAT.....
.....TACTTTAAATGTGTGCGGTAT.....
.....TACTTTAAATGTGTGCGGTATAT.....

```

```

>osa-miR2124b_MIMAT0011187_Oryza_sativa_miR2124b
TAGGCTTAATAAAATCGTGTGCGGTTTACAGCGGATTCATTATTAGACTACGTTAACTTTAAATGTGTGCGGTATATCGATGTGACACCTAAAATTCACACCTGATCATACAGCCATATCATGATGC
*****ACTTTAAATGTGTGCGGTATATTT*****

```

```

osa-miR2124b 24
1 24
1 24
2 24
1 24
2 24
3 24
1 24
2 24
2 24
1 24
1 22
1 24

```

```

.GGCTTAATAAAATCGTGTGCGGT.....
.AATAAAATCGTGTGCGGTTTACA.....
.AAATTCGTGTGCGGTTTACAGGC.....
.TCGTGTGCGGTTTACAGCGGAT.....
.....GTTTACAGCGGATTCATTATTAG.....
.....ATTAGTCTACGTTAACTTTAA.....
.....AGACTAGTCTAACTTTAAATG.....
.....ACTAGTCTAACTTTAAATGTG.....
.....AATCTTTAAATGTGTGCGGTAT.....
.....TACTTTAAATGTGTGCGGTAT.....
.....TACTTTAAATGTGTGCGGTATAT.....

```

```

>osa-miR2124c_MIMAT0011188_Oryza_sativa_miR2124c
TTGCTCTGCTAGTTTCTGCGGAATCTGTAATTTATTGTTATTAGACACGTTAACTTTAAATGTGTGCGGTATATCGATGTGACACCTAAAATAAATTTTCCATCTAACTGGGCTTAGCAACAACCATG
*****ACTTTAAATGTGTGCGGTATATTT*****

```

```

osa-miR2124c 24
1 24
1 22
1 24

```

```

.....AATCTTTAAATGTGTGCGGTAT.....
.....TACTTTAAATGTGTGCGGTAT.....
.....TACTTTAAATGTGTGCGGTATAT.....

```

```

>osa-miR2124d_MIMAT0011189_Oryza_sativa_miR2124d
TTGACTCGCAGTTTCTGCGGAATCTGTAATTTATTGTTATTAGACTATGTTAACTTTAAATGTGTGCGGTATATCGATGTGACAACTAAAATTTTCCCACTAAAACAGGCAAAAGGCTGTAGT
*****ACTTTAAATGTGTGCGGTATATTT*****

```

```

osa-miR2124d 24
1 24
1 24
1 22
1 24

```

```

.....AGACTATGTTAACTTTAAATG.....
.....AATCTTTAAATGTGTGCGGTAT.....
.....TACTTTAAATGTGTGCGGTAT.....
.....TACTTTAAATGTGTGCGGTATAT.....

```

```

>osa-miR2124e_MIMAT0011190_Oryza_sativa_miR2124e
TTGCTCTCGCAGTTTACAGCGGAATGTAATTTGTTTGTATTAGTCTACGTTAACTTTAAATGTGTGCGGTATATCGATGTGACACGCTAAAATTTTCCACCTGAACAAACAGGCAATCTCACCAAGAC
*****ACTTTAAATGTGTGCGGTATATTT*****

```

```

osa-miR2124e 24
1 24
1 24
1 24
1 24
1 21
1 23
1 25
1 24
1 22
1 24
1 18
1 24

```

```

.....TCGTCTCGCAGTTTATAGCGGA.....
.....GCGGAATATGTAATTTGTTTGT.....
.....GTAATTTGTTTGTATTAGTCTA.....
.....AATTTGTTTGTATTAGTCTACG.....
.....TTTGTATTAGTCTACGTTA.....
.....ATTAGTCTACGTTAACTTTAA.....
.....ATTAGTCTACGTTAACTTTAAA.....
.....AATCTTTAAATGTGTGCGGTAT.....
.....TACTTTAAATGTGTGCGGTAT.....
.....TACTTTAAATGTGTGCGGTATAT.....
.....CGATGTGACACGCTAAA.....
.....ATGTGACACGCTAAAATTTTCA.....

```

```

>osa-miR2124f_MIMAT0011191_Oryza_sativa_miR2124f
TTGCTCTCTGGTTTACAGCGGATCTGCAATTTGTTTGTATTAGACTACGTTAACTTTAAATGTGTGCGGTATATCTATGTGACACGCCAACTTTACACCGTAGACTAAATACAGCTAAATTTATTTT
*****ACTTTAAATGTGTGCGGTATATTT*****

```

```

>osa-miR2124g_MIMAT0011192_Oryza_sativa_miR2124g
TTTCGCTCGCGGTTTACAGCGGAATCTCAATTTGTTTGTATTAGTCTACATTTAACTTTAAATGTGTCCGTATATTCAGTGTGACACGCCAAATTTTACAACCCGGATCTAAACACAGCCTTAGTCACCGCTGCT
*****ACTTTAAATGTGTCCGTATATTT*****
.....AATACTTTAAATGTGTCCGTAT.....
.....TACTTTAAATGTGTCCGTAT.....
.....TACTTTAAATGTGTCCGTATAT.....
.....ATTTTACAACCCGGATCTAAAC.....
osa-miR2124g 24
1 24
1 22
1 24
1 22

>osa-miR2124i_MIMAT0011193_Oryza_sativa_miR2124i
TTTCGCTCGTAGTTTACAAGTGAATCTGTAATTTGTTTGTAGCTACGTTTAACTTTAAATGTGTCCGTATATTCAGTGTGACACGCCAAATTTTACCCTCGAATCTAAACACAGCCTTATAAGATAATTT
*****ACTTTAAATGTGTCCGTATATTT*****
.....AATACTTTAAATGTGTCCGTAT.....
.....TACTTTAAATGTGTCCGTAT.....
.....TACTTTAAATGTGTCCGTATAT.....
.....ATATTGATGTGACACGCCAAATTT.....
.....ATATTGATGTGACACGCCAAATTT.....
.....ATTGATGTGACACGCCAAATTT.....
osa-miR2124i 24
1 24
1 22
1 24
1 23
2 24
1 24

>osa-miR2125_MIMAT0011194_Oryza_sativa_miR2125
GTAACCCCTCAATAGTATGCTACATGGGTATCTATAGCTCTTAATGCATTGCCTGTTTTCTCTATAGACTATCCAGGTTAATAGTAGCTTTGCTCTCTCTCATTAACTCTTCCAAGTAGGAAAATATGCT
*****TTTTCTCTATAGACTATCCAG*****
..AAACCCTCAATAGTATGCTA.....
..AAACCCTCAATAGTATGCTAC.....
..AAACCCTCAATAGTATGCTA.....
..TCAATAGTATGCTACATGG.....
..TAGTATGCTACATGGGTATCTA.....
..TATGCTACATGGGTATCTAT.....
..GTCTACATGGGTATCTATAGCTCT.....
..CTACATGGGTATCTATAGCTCT.....
..TACATGGGTATCTATAGCTCT.....
..TACATGGGTATCTATAGCTCTA.....
..GGGTATCTATAGCTCTAATGCA.....
..TATAGCTCTAATGCATTGC.....
..GCCTGTTTTCTCTATAGACTAT.....
..TTTTCTATAGACTATCCAGGT.....
..TTCTCTATAGACTATCCAGGT.....
..AGATAGCTTTGCTCTCTCTTCAT.....
..TCATTTAATCTCTTCCAAGTAGGA.....
..ATTTAATCTCTTCCAAGTAGGAAA.....
..AATCTCTTCCAAGTAGGAAA.....
..AATCTCTTCCAAGTAGGAAAATAT...
..TTCCAAGTAGGAAAATATGCT
osa-miR2125 24
1 23
2 24
1 22
1 20
1 23
1 21
1 24
1 24
1 21
1 24
1 24
1 21
1 24
1 24
2 24
1 25
1 24
1 24
1 20
4 24
5 21

>osa-miR2124h_MIMAT0011195_Oryza_sativa_miR2124h
TTTGTCTCGCGGTTTACAAGTGAATCTGTAATTTGTTTATTACTAGTCTATGTTTAACTTTAAATGTGTCCGTATATTCAGTGTGACACCTCAAACTTTTACCACCTGATAAAGATGACACAATGAGGGCTGGTG
*****ACTTTAAATGTGTCCGTATATTT*****
.....AATACTTTAAATGTGTCCGTAT.....
.....TACTTTAAATGTGTCCGTAT.....
.....TACTTTAAATGTGTCCGTATAT.....
osa-miR2124h 24
1 24
1 22
1 24

```


Fig. S8

<p>>ppt-miR390b_MIMAT0003132_Physcomitrella_patens_miR390b ACATCGATGCGATAGATCGCCATTGTCGCCGAACTGGTCGACCTCCGCCGGCGTCTCTGGACTGAAGGGAGCTCCACTTTGGCGTCTCTGGCATGCAGCTGCAGTTGGTCTTAAGTTGACTCCACAGTTG *****AAGCTCAGGAGGGATAGCCG*****</p>		ppt-miR390b	21
.....AAGCTCAGGAGGGATAGCCG.....		9	20
.....AAGCTCAGGAGGGATAGCCCA.....		1	23
.....AAGCTCAGGAGGGATAGCCGC.....		1	22
.....AAGCTCAGGAGGGATAGCCG.....		1	19
.....AAGCTCAGGAGGGATAGCCG.....		264	21
.....AGCTCAGGAGGGATAGCCG.....		10	20
.....AGCTCAGGAGGGATAGCCGC.....		1	21
<p>>ppt-miR319a_MIMAT0003133_Physcomitrella_patens_miR319a GCCCGATACGGTATCCGAACGTTTGTCCCGGAACTGGTCGACCTCCGCCGGCGTCTCTGGACTGAAGGGAGCTCCACTTTGGCGTCTCTGGCATGCAGCTGCAGTTGGTCTTAAGTTGACTCCACAGTTG *****CTTGGACTGAAGGGAGCTCC*****</p>		ppt-miR319a	20
.....AAGCTTGTCCCGGAACTGG.....		1	21
.....TCGACCTTCCGCCGGCGT.....		13	19
.....TCGACCTTCCGCCGGCGTCT.....		33	20
.....TCGACCTTCCGCCGGCGTCT.....		64	21
.....CGACCTTCCGCCGGCGTCT.....		2	20
.....GACCTTCCGCCGGCGTCT.....		2	19
.....GCTCTCTTGGACTGAAGGGAGCT.....		1	24
.....TCTCTTGGACTGAAGGGAGCTCC.....		1	23
.....TCTCTTGGACTGAAGGGAGCT.....		13	21
.....TCTCTTGGACTGAAGGGAGCT.....		1	22
.....TCTCTTGGACTGAAGGGAGCTCC.....		7	21
.....TCTTGGACTGAAGGGAGCTC.....		1	20
.....CTTGGACTGAAGGGAGCTC.....		24	19
.....CTTGGACTGAAGGGAGCTCC.....		442	20
.....CTTGGACTGAAGGGAGCTCCAC.....		10	22
.....CTTGGACTGAAGGGAGCTCCA.....		403	21
.....TTGGACTGAAGGGAGCTCC.....		10	19
.....TTGGACTGAAGGGAGCTCCA.....		24	20
.....TTGGACTGAAGGGAGCTCCAC.....		23	21
.....TGGACTGAAGGGAGCTCCA.....		3	19
.....TGGACTGAAGGGAGCTCCAC.....		3	20
<p>>ppt-miR319b_MIMAT0003134_Physcomitrella_patens_miR319b CGCGTATGGAATCCGAAGTCTGATACGGGAGCTGATCAGTCTCAGGTTAGCATCTCTTGGACTGAAGGGAGCTCCCTTACAGGCCTGATTCAGTGTTCGCTGCTAGGTTGCCAATCTATGATCGCTGT *****CTTGGACTGAAGGGAGCTCC*****</p>		ppt-miR319b	20
.....AAGTCTGATCCGGGAGCTGA.....		10	21
.....TTAGCATCTCTTGGACTGAA.....		6	20
.....TTAGCATCTCTTGGACTGAAG.....		46	21
.....ATCTCTTGGACTGAAGGGAG.....		1	20
.....ATCTCTTGGACTGAAGGGA.....		1	19
.....TCTCTTGGACTGAAGGGAGCTCC.....		1	23
.....TCTCTTGGACTGAAGGGAGCT.....		13	21
.....TCTCTTGGACTGAAGGGAGCTC.....		1	22
.....TCTTGGACTGAAGGGAGCTCC.....		7	21
.....TCTTGGACTGAAGGGAGCTC.....		1	20
.....CTTGGACTGAAGGGAGCTCT.....		19	21
.....CTTGGACTGAAGGGAGCTC.....		24	19
.....CTTGGACTGAAGGGAGCTCC.....		442	20
.....TTGGACTGAAGGGAGCTCC.....		10	19
.....TTGGACTGAAGGGAGCTCCT.....		1	20
<p>>ppt-miR319c_MIMAT0003135_Physcomitrella_patens_miR319c AGAAATGCGAGGAAATCCGAATGCTGATGCGGGAGCTGAGCGTCTCAACTCAGCTTCTCTTGGACTGAAGGGAGCTCCCATGCTTTGGTGTAGGTAATGTGGAACCTGGTTGAGTTAGTAACTGTGTACCAATA *****CTTGGACTGAAGGGAGCTCC*****</p>		ppt-miR319c	21
.....AATGCTGATCCGGGAGCTGA.....		13	21
.....CTGATCCGGGAGCTGAGCGGT.....		1	21
.....GCGGTCTTCAACTCAGCTT.....		5	19
.....GCGGTCTTCAACTCAGCTTCTCT.....		1	23
.....GCGGTCTTCAACTCAGCTTC.....		11	20
.....GCGGTCTTCAACTCAGCTTCT.....		58	21
.....GCTTCTTGGACTGAAGGGAGCTC.....		1	25
.....GCTTCTTGGACTGAAGGGAGCTCC.....		1	26
.....TCTCTTGGACTGAAGGGAGCTCC.....		1	23
.....TCTCTTGGACTGAAGGGAGCT.....		13	21
.....TCTCTTGGACTGAAGGGAGCTC.....		1	22
.....TCTTGGACTGAAGGGAGCTCC.....		7	21
.....TCTTGGACTGAAGGGAGCTC.....		1	20
.....CTTGGACTGAAGGGAGCTCC.....		1171	21
.....CTTGGACTGAAGGGAGCTCCA.....		10	22
.....CTTGGACTGAAGGGAGCTC.....		24	19
.....CTTGGACTGAAGGGAGCTCC.....		442	20
.....CTTGGACTGAAGGGAGCTCCCAT.....		1	23
.....TTGGACTGAAGGGAGCTCC.....		10	19
.....TTGGACTGAAGGGAGCTCCCA.....		1	21
.....TTGGACTGAAGGGAGCTCCC.....		31	20
.....TGGACTGAAGGGAGCTCCC.....		6	19
.....TGGACTGAAGGGAGCTCCCA.....		2	20
<p>>ppt-miR319d_MIMAT0003136_Physcomitrella_patens_miR319d CCCTGGATGGAATCCGAATGCTGATACGGGAGCTGTTCAATCTCCGGCTTAGCATCTCTTGGACTGAAGGGAGCTCCCGCTGTAAGCTTATTGCGTATGATAGCGTACCAAGTCTTATGATACAATCGCT *****CTTGGACTGAAGGGAGCTCC*****</p>		ppt-miR319d	21
.....AATGCTGATCCGGGAGCTGT.....		1	21
.....TACGGGAGCTGTTCAATCTCCGG.....		6	24
.....ACGGGAGCTGTTCAATCTCCGG.....		1	23
.....GGAGCTGTTCAATCTCCGG.....		1	19
.....GGAGCTGTTCAATCTCCGG.....		5	20
.....GAGCTGTTCAATCTCCGGCTTAGC.....		2	24
.....TGTTCAATCTCCGGCTTAGCA.....		1	21
.....TGTTCAATCTCCGGCTTAGCATC.....		1	23
.....TCAATCTCCGGCTTAGCATC.....		56	20
.....TCAATCTCCGGCTTAGCATCT.....		134	21
.....TCAATCTCCGGCTTAGCAT.....		19	19
.....AATCTCCGGCTTAGCATCT.....		1	19

```

.....TCCGGCTTAGCATCTCTTGA..... 1 21
.....TTAGCATCTCTGGACTGAA..... 6 20
.....TTAGCATCTCTGGACTGAA..... 46 21
.....ATCTCTGGACTGAAGGAG..... 1 20
.....ATCTCTGGACTGAAGGAG..... 1 19
.....TCTCTGGACTGAAGGAGCTCC..... 1 23
.....TCTCTGGACTGAAGGAGCT..... 13 21
.....TCTCTGGACTGAAGGAGCTC..... 1 22
.....TCTTGGACTGAAGGAGCTCC..... 7 21
.....TCTTGGACTGAAGGAGCTC..... 1 20
.....CTTGGACTGAAGGAGCTCC..... 1171 21
.....CTTGGACTGAAGGAGCTCCCC..... 14 22
.....CTTGGACTGAAGGAGCTC..... 24 19
.....CTTGGACTGAAGGAGCTC..... 442 20
.....TTGGACTGAAGGAGCTCC..... 10 19
.....TTGGACTGAAGGAGCTCCCC..... 6 21
.....TTGGACTGAAGGAGCTCC..... 31 20
.....TGGACTGAAGGAGCTCC..... 6 19
.....ACTGAAGGAGCTCCCGCTG..... 1 22

```

```

>ppt-miR533a_MIMAT0004783_Physcomitrella_patens_miR533a
TGTGAGGGACGAGCAGAGTTGGCTTGGCTCTTGTGGCCCTCCAGCAGCTCTCTCTCCTCAGCTCTGACAGCTCTCGTCTCTTGTCTCTTTTCAGCCACTTTGGATACTTTGGAGTGTTCGTTCTGCTCGA
*****CTCAGCTCTGACAGCTCTC***** ppt-miR533a 21
.....CTCCTCAGCTCTGACAGCTCTC..... 1 24
.....TCTCAGCTCTGACAGCTCTC..... 1 23
.....CTCAGCTCTGACAGCTCTC..... 3 22
.....CTCAGCTCTGACAGCTC..... 1 19
.....CTCAGCTCTGACAGCTCTC..... 1 22
.....CTCAGCTCTGACAGCTCT..... 4 20
.....CTCAGCTCTGACAGCTCTC..... 327 21
.....TCAAGCTCTGACAGCTCTC..... 2 21
.....TCAAGCTCTGACAGCTCTC..... 68 20
.....CACAGCTCTGACAGCTCTC..... 1 19

```

```

>ppt-miR534a_MIMAT0003138_Physcomitrella_patens_miR534a
ACCCACAAGTTTTGGAAGTTGTTTTGATTGGGGCCACCACATTGCTCGACTAGATTGATGTCATTGCAGTTGCATACATATGGATGGCGTTCAGTGAACAACCTTCGATCAAGGTGAGGGGGTACAGTTAGTTTC
*****ATGTCCATTGCAGTTGCATAC***** ppt-miR534a 22
.....AGTATGCCATTGCAGTTGCATAC..... 54 24
.....AGTATGCCATTGCAGTTGCA..... 1 21
.....AGTATGCCATTGCAGTTGCATA..... 11 23
.....AGTATGCCATTGCAGTTGCATAC..... 2 25
.....GTATGCCATTGCAGTTGCATA..... 1 22
.....TATGCCATTGCAGTTGCATA..... 130 21
.....TATGCCATTGCAGTTGCAT..... 15 20
.....TATGCCATTGCAGTTGCATACATA..... 1 25
.....TATGCCATTGCAGTTGCATAC..... 2568 22
.....TATGCCATTGCAGTTGCATAC..... 25 23
.....TATGCCATTGCAGTTGCATACAT..... 1 24
.....TATGCCATTGCAGTTGCA..... 24 19
.....ATGTCCATTGCAGTTGCATAC..... 387 21
.....ATGTCCATTGCAGTTGCATAC..... 5 22
.....ATGTCCATTGCAGTTGCATA..... 16 20
.....TGTCATTGCAGTTGCATAC..... 2 20

```

```

>ppt-miR536a_MIMAT0003144_Physcomitrella_patens_miR536a
CCAGTGTATAAAGTTTGTCCAGTGTAGCTCTTCACTTGGGGATTGCACAACAGGGGTTCTGTGCCAAGCTGTGTGCAACCTAAAGGTTGTTTAAATTCAGGTTTATGCATCAGGATTCGACGAGAGATACATGGG
*****TTCTGTCGAAGCTGTGTGCAAC***** ppt-miR536a 22
.....TTCTGTCGAAGCTGTGTGCAAC..... 1993 21
.....TTCTGTCGAAGCTGTGTGCA..... 4 19
.....TTCTGTCGAAGCTGTGTGCA..... 72 20
.....TTCTGTCGAAGCTGTGTGCAACTAA..... 1 26
.....TTCTGTCGAAGCTGTGTGCAACT..... 1 24
.....TTCTGTCGAAGCTGTGTGCAACC..... 301 23
.....TTCTGTCGAAGCTGTGTGCAACTA..... 1 25
.....TTCTGTCGAAGCTGTGTGCAAC..... 17988 22
.....TCGTGCCAAGCTGTGTGCAACC..... 8297 22
.....TCGTGCCAAGCTGTGTGCAAC..... 37 19
.....TCGTGCCAAGCTGTGTGCAAC..... 10950 21
.....TCGTGCCAAGCTGTGTGCAACT..... 13 23
.....TCGTGCCAAGCTGTGTGCAAC..... 1051 20
.....CGTGCCAAGCTGTGTGCAAC..... 247 20
.....CGTGCCAAGCTGTGTGCAACT..... 3 22
.....CGTGCCAAGCTGTGTGCAAC..... 24 19
.....CGTGCCAAGCTGTGTGCAACC..... 303 21
.....GTGCCAAGCTGTGTGCAACT..... 1 21
.....GTGCCAAGCTGTGTGCAAC..... 303 19
.....GTGCCAAGCTGTGTGCAACC..... 272 20
.....TGCCAAGCTGTGTGCAACC..... 73 19

```

```

>ppt-miR537a_MIMAT0003145_Physcomitrella_patens_miR537a
CTGTTTCTGTGATGCTTTGAGGTTTGGCATGAGATAGCATCGTTAGGCTTCAAACCTTGAAGTGTCTTACAGGCTACATATGATTAGTCTTGTGCATATCCAAGCTCTCGCATTCTCGATTGCATGTCGAGC
*****TTGAGGTGTTTTCTACAGGCTA***** ppt-miR537a 21
.....TTCAAACCTTGAAGTGTCTT..... 1 21
.....TCAAACCTTGAAGTGTCTT..... 4 21
.....CTTGAAGTGTCTTACAGGCTAC..... 1 23
.....TTGAGGTGTTTTCTACAGGC..... 2 19
.....TTGAGTGTCTTACAGGCT..... 5 20
.....TTGAGGTGTTTTCTACAGGCTA..... 26 21

```

```

>ppt-miR537b_MIMAT0003146_Physcomitrella_patens_miR537b
TGATTGAGCACTCTCAGATGTTTCAGATGTAATGAAACCGGTGCAAGCTCTGAGGTGTTTTCTACAGGCTACATATGATAGATGGCTACCTGGATATACCAAGTCTGGCTGTTGCATTTTCATGTTTCAA
*****TTGAGGTGTTTTCTACAGGCTA***** ppt-miR537b 21
.....AACCGGTGCAAGCTCTCAGCT..... 2 21
.....CTTCAAGCTCTTGAAGTGTCTT..... 1 21
.....TTCAAGCTCTTGAAGTGTCTT..... 51 22
.....TTCAAGCTCTTGAAGTGTCTTCTAC..... 1 24
.....TTCAAGCTCTTGAAGTGTCTTCT..... 170 21
.....TTCAAGCTCTTGAAGTGTCTT..... 3 20

```

```

.....TCAAGCTCTTGAGGTGTTT..... 1 19
.....TCAAGCTCTTGAGGTGTTTCT..... 250 21
.....TCAAGCTCTTGAGGTGTTTCTA..... 1 22
.....TCAAGCTCTTGAGGTGTTTCTAC..... 1 23
.....TCAAGCTCTTGAGGTGTTTCT..... 3 20
.....AAGCTCTTGAGGTGTTTCT..... 7 19
.....CTTGAGGTGTTTCTACAGGCTAC..... 1 23
.....TTGAGGTGTTTCTACAGGC..... 2 19
.....TTGAGGTGTTTCTACAGGCT..... 5 20
.....TTGAGGTGTTTCTACAGGCTA..... 26 21

```

```

>ppt-miR538a_MIMAT0003147_Physcomitrella_patens_miR538a
AGTTTATGACGAAGATCATGATCTTACAATGAGTTTGTGAGTCTCCATGCTCTAACATTGCATGGAGTCTATGCTGGATATTGCTCCTCATTCCCGTCAAATGCTGAAGTAATGCAAGAATGTGAACATGGGACT
*****TTGCATGGAGTCTATGCTGGA***** ppt-miR538a 22
.....AGTCTCCATGCTGCTCTAACAT..... 1 22
.....GTCTCCATGCTGCTCTAACAT..... 1 20
.....GTCTCCATGCTGCTCTAACAT..... 18 21
.....GTCTCCATGCTGCTCTAAC..... 1 19
.....GTCTCCATGCTGCTCTAACATT..... 3 22
.....CATGCTGCTCTAACATTGCATGG..... 1 23
.....CTCTAACATTGCATGGAGTCTA..... 5 22
.....CTCTAACATTGCATGGAGTCT..... 1 21
.....TCTAACATTGCATGGAGTCTAT..... 3 22
.....TCTAACATTGCATGGAGTCTA..... 4 21
.....CTAACATTGCATGGAGTCTAT..... 1 21
.....CTAACATTGCATGGAGTCTATG..... 1 22
.....TAACATTGCATGGAGTCTATGT..... 24 22
.....TAACATTGCATGGAGTCTATGCT..... 11 23
.....TAACATTGCATGGAGTCTATGCT..... 1 24
.....TAACATTGCATGGAGTCTATG..... 2 21
.....AACATTGCATGGAGTCTATGT..... 1 21
.....AACATTGCATGGAGTCTATGCTG..... 1 24
.....TTGCATGGAGTCTATGCTGG..... 24 21
.....TTGCATGGAGTCTATGCTG..... 2 20
.....TTGCATGGAGTCTATGCT..... 2 19
.....TTGCATGGAGTCTATGCTGAG..... 1 23
.....TTGCATGGAGTCTATGCTGGA..... 865 22
.....TTGCATGGAGTCTATGCTGGAGT..... 2 24
.....TGCATGGAGTCTATGCTGGAGT..... 1 23
.....TGCATGGAGTCTATGCTGGA..... 95 21
.....TGCATGGAGTCTATGCTGGA..... 13 22
.....TGCATGGAGTCTATGCTGG..... 11 20
.....GCATGGAGTCTATGCTGGA..... 1 20
.....CATGGAGTCTATGCTGGA..... 1 19
.....TGGAGTCTATGCTGGAGTATT..... 1 22

```

```

>ppt-miR538b_MIMAT0003148_Physcomitrella_patens_miR538b
CCATAGGAGTGGAGGTTATCTTGTACGAAGAGTTCTAGTCTCCATGCTCTAACGTTGCATGGAGTCTATGCTGGACTCCTCCATTGCTCTTCAAGAGAATGTGAGAATTTGAGATTCGGACATAGCCTTCA
*****TTGCATGGAGTCTATGCTGGA***** ppt-miR538b 22
.....CTCTAACGTTGCATGGAGTCT..... 1 21
.....TTGCATGGAGTCTATGCTGG..... 24 21
.....TTGCATGGAGTCTATGCTG..... 2 20
.....TTGCATGGAGTCTATGCTGGACC..... 1 24
.....TTGCATGGAGTCTATGCTCT..... 2 19
.....TTGCATGGAGTCTATGCTGGAC..... 12 23
.....TTGCATGGAGTCTATGCTGGA..... 865 22
.....TGCATGGAGTCTATGCTGGA..... 95 21
.....TGCATGGAGTCTATGCTGGAC..... 7 22
.....TGCATGGAGTCTATGCTGG..... 11 20
.....GCATGGAGTCTATGCTGGA..... 1 20
.....CATGGAGTCTATGCTGGA..... 1 19

```

```

>ppt-miR538c_MIMAT0003149_Physcomitrella_patens_miR538c
ATATAGAGTGGAGGATGTTTCAAGAGTCTTGTGAGTCTCCATGCTCTAACGTTGCATGGAGTCTATGCTGGACTCCTCCATTGCTCTTCAAGAGAATGTGAGCATTGAAGGATTCGGACATAGCCTTCA
*****TTGCATGGAGTCTATGCTGGA***** ppt-miR538c 22
.....AGTCTCCATGCTCTCTGACG..... 10 21
.....AGTCTCCATGCTCTCTGAC..... 1 20
.....TTGCATGGAGTCTATGCTGG..... 24 21
.....TTGCATGGAGTCTATGCTG..... 2 20
.....TTGCATGGAGTCTATGCTGGACC..... 1 24
.....TTGCATGGAGTCTATGCTCT..... 2 19
.....TTGCATGGAGTCTATGCTGGAC..... 12 23
.....TTGCATGGAGTCTATGCTGGA..... 865 22
.....TGCATGGAGTCTATGCTGGA..... 95 21
.....TGCATGGAGTCTATGCTGGAC..... 7 22
.....TGCATGGAGTCTATGCTGG..... 11 20
.....GCATGGAGTCTATGCTGGA..... 1 20
.....CATGGAGTCTATGCTGGA..... 1 19

```

```

>ppt-miR1215_MIMAT0003904_Physcomitrella_patens_miR1215
GCCAGTGCAGTAGAGCTTGTATCCCTGGCATGATTTGTGTTGCTGAAGTACTGGAGCTCATTGCAAAACTGTATACGATCCTTCAACTGAACAGCATTGAAAGCTTTGGCTATTGCTCAGAGATGTTATACAG
*****TCATTGCAAAACTGTATACGA***** ppt-miR1215 21
.....TCATTGCAAAACTGTATACGATC..... 3 23
.....TCATTGCAAAACTGTATACG..... 13 20
.....TCATTGCAAAACTGTATACGA..... 847 21
.....TCATTGCAAAACTGTATAC..... 6 19
.....TCATTGCAAAACTGTATACGAT..... 76 22
.....CATTGCAAAACTGTATACGA..... 13 20
.....ATTGCAAAACTGTATACGAT..... 1 20
.....ATTGCAAAACTGTATACGA..... 3 19

```

```

>ppt-miR1217-5p_MIMAT0004830_Physcomitrella_patens_miR1217-5p
ACGGAACGGAAGCCAGATATTGAGTGAAGTGGAAAGTCTGTTCTGGTTGATCTGGTATCATGTTGCAAAATGGCAAACTGTGACCGAATGGTACTCAGTTTTGAAATTTGAAGCATGATGCAAGTACAA
*****TGGTATCATGTTGCAAAATGGC***** ppt-miR1217-5p 21
.....TTGATCTGGTATCATGTTGC..... 2 21
.....TGGTATCATGTTGCAAAATGGCAA..... 5 24
.....TGGTATCATGTTGCAAAATGGC..... 39 21
.....TGGTATCATGTTGCAAAATGG..... 4 20

```

```

.....TGGTATCATGTTGCAAATGGCA..... 3 22
.....CTGTGACCGGAATGGTACTCAGT..... 1 23
.....CTGTGACCGGAATGGTACTCAGTT..... 7 24
.....TGTGACCGGAATGGTACTCAGTT..... 1 23
.....TGTGACCGGAATGGTACTCAGT..... 1 22
.....TGTGACCGGAATGGTACTCAG..... 1 21
.....TTTTGAAATTTGAAGCATGAT..... 1 21
.....TTTGAATTTGAAGCATGATG..... 1 21
.....TTGAAATTTGAAGCATGATGCAA..... 1 24
.....TGAATTTGAAGCATGATGCAAG..... 5 24
.....AAATTTGAAGCATGATGCAAG..... 2 22
.....AAATTTGAAGCATGATGCAAG..... 913 21
.....AAATTTGAAGCATGATGCA..... 2 19
.....AAATTTGAAGCATGATGCAAGT..... 15 22
.....AAATTTGAAGCATGATGCAAG..... 21 20
.....ATTTGAAGCATGATGCAAG..... 5 20
.....TTTGAAGCATGATGCAAG..... 1 19
.....TTGAAGCATGATGCAAGTAC..... 6 21

```

```

>ppt-miR1217-3p_MIMAT0003906_Physcomitrella_patens_miR1217-3p
GATCTTGGTATCATGTTGCAAATGGCAAACCTGTGACCGGAATGGTACTCAGTTTTGAAATTTGAAGCATGATGCAAGTACAACGGAATGGACGGTAGCTTCTGTAAACAAGTTGAGCTTTGTTGTTCTTACGA
*****AATTTGAAGCATGATGCAAG*****
.....TGGTATCATGTTGCAAATGGCAA..... 5 24
.....TGGTATCATGTTGCAAATGGC..... 39 21
.....TGGTATCATGTTGCAAATGG..... 4 20
.....TGGTATCATGTTGCAAATGGCA..... 3 22
.....CTGTGACCGGAATGGTACTCAGT..... 1 23
.....CTGTGACCGGAATGGTACTCAGTT..... 7 24
.....TGTGACCGGAATGGTACTCAGTT..... 1 23
.....TGTGACCGGAATGGTACTCAGT..... 1 22
.....TGTGACCGGAATGGTACTCAG..... 1 21
.....TTTTGAAATTTGAAGCATGAT..... 1 21
.....TTTGAATTTGAAGCATGATG..... 1 21
.....TTGAAATTTGAAGCATGATGCAA..... 1 24
.....TGAATTTGAAGCATGATGCAAG..... 5 24
.....AAATTTGAAGCATGATGCAAG..... 2 22
.....AAATTTGAAGCATGATGCAAG..... 913 21
.....AAATTTGAAGCATGATGCA..... 2 19
.....AAATTTGAAGCATGATGCAAGT..... 15 22
.....AAATTTGAAGCATGATGCA..... 21 20
.....ATTTGAAGCATGATGCAAG..... 5 20
.....TTTGAAGCATGATGCAAG..... 1 19
.....TTGAAGCATGATGCAAGTAC..... 6 21

```

```

>ppt-miR1218_MIMAT0003907_Physcomitrella_patens_miR1218
ACACTGGCAGTCATGAACACACCTCACTGCTTCACTGATTACATGTCGTGGTAGGCATCCTTAGAGTCGTAGGCCTCTGTGGAATCAAGATAGTTCACAGTCGTTTTGAACACACATCACAGGAGCCTACGACTC
*****CCTTAGAGTCGTAGGCCTCTG*****
.....TGGTAGGCATCCTTAGAGTCG..... 9 21
.....TGGTAGGCATCCTTAGAGT..... 1 19
.....TAGGCATCCTTAGAGTCGATG..... 2 21
.....TCCTTAGAGTCGTAGGCCTCT..... 2 21
.....CCTTAGAGTCGTAGGCCTCTG..... 596 21
.....CCTTAGAGTCGTAGGCCTCT..... 1 19
.....CCTTAGAGTCGTAGGCCTCTGT..... 53 22
.....CCTTAGAGTCGTAGGCCTCT..... 33 20
.....CCTTAGAGTCGTAGGCCTCTG..... 2 23
.....CCTTAGAGTCGTAGGCCTCTG..... 242 20
.....CCTTAGAGTCGTAGGCCTCT..... 8 19
.....CTTAGAGTCGTAGGCCTCTGTG..... 13 22
.....CTTAGAGTCGTAGGCCTCTGT..... 32 21
.....TTAGAGTCGTAGGCCTCTG..... 15 19
.....TTAGAGTCGTAGGCCTCTGTG..... 2 21
.....TTAGAGTCGTAGGCCTCTGT..... 1 20
.....AGAGTCGTAGGCCTCTGTG..... 1 19
.....AGAGTCGTAGGCCTCTGTG..... 4 21
.....TAGTTCACAGTCGTTTTGAAC..... 1 21
.....CATCACAGGAGCCTACGACTC..... 1 21

```

```

>ppt-miR535d_MIMAT0003915_Physcomitrella_patens_miR535d
TGGACATCGACTTGGCGTAAGTGCACCCGACATACACGTTTGACAGCGTAAGTGGGTGACACGAGAGAGACGACCGGAATGCGTTCATGCAGCGAGTGCCTGAGGTTGCGAGCGTCCCTCTCCCGTCGTC
*****TGACAACGAGAGAGACGACG*****
.....GTACAACGAGAGAGACGACG..... 1 22
.....TGACAACGAGAGAGACGACG..... 108 22
.....TGACAACGAGAGAGACGACG..... 43 20
.....TGACAACGAGAGAGACGACG..... 1216 21
.....TGACAACGAGAGAGACGAC..... 19 19
.....GACAACGAGAGAGACGACG..... 13 20
.....GACAACGAGAGAGACGACG..... 2 19
.....ACAACGAGAGAGACGACG..... 6 19
.....ACGAGAGAGACGACGCGGAA..... 1 21
.....ACGAGAGAGACGACGCGGA..... 1 20
.....AGAGAGACGCGGGAATGCGTTCA..... 1 24
.....CGAGCGTCCCTCTCCCGTGT..... 1 22
.....CGAGCGTCCCTCTCCCGTGT..... 1 21
.....GTGCCCTCTCCCGTGTCA..... 9 19

```

```

>ppt-miR1221-3p_MIMAT0004834_Physcomitrella_patens_miR1221-3p
CGGCGGTTTGTGCGAAGTGGTACCTTAGTGGTTGGACACATATGAATCAGGAGCATTGGCCCATGCACAGTATCTACGCAAGTCTCTGGTCTGTTGGTGCAGTGGCGAGAGGCTCAAGCTTCGGGACAGTGGAAA
*****TGCCCATGCACAGTATCTACG*****
.....TTGCCCATGCACAGTATCTACG..... 4 23
.....TTGCCCATGCACAGTATCT..... 1 20
.....TTGCCCATGCACAGTATCT..... 2 19
.....TTGCCCATGCACAGTATCTA..... 2 20
.....TTGCCCATGCACAGTATCTACG..... 101 22
.....TTGCCCATGCACAGTATCTAC..... 18 21

```

```

>ppt-miR1222a_MIMAT0003917_Physcomitrella_patens_miR1222a
GTTGTGGGCTTCTTGTGACTAATCTCTCATGCAAGTGGCTTCTAGCAGCTGCTTGAAGGAGTTCATTGGTATAATAATGCCACAACATGATGACCGATTAACTGAGCGACGCTACCGGAATGTTGATCGG

```

```

*****TTGAAGGAGTTCATTGGTATA*****
ppt-miR122a 21
.....TGCTAGTAACTCCTCATG..... 2 20
.....TGCTAGTAACTCCTCATG..... 43 21
.....CTGAAGGAGTTCATTGGTATA..... 1 22
.....TTGAAGGAGTTCATTGGTATA..... 1 23
.....TTGAAGGAGTTCATTGGTATA..... 4 19
.....TTGAAGGAGTTCATTGGTATA..... 5 22
.....TTGAAGGAGTTCATTGGTATA..... 597 21
.....TTGAAGGAGTTCATTGGTATA..... 19 20
.....TTGAAGGAGTTCATTGGTATA..... 3 20
.....GAAGGAGTTCATTGGTATA..... 1 19

```

```

>ppt-miR477c_MIMAT0004359_Physcomitrella_patens_miR477c
TAGTTGAATCACAGAGTTGCTACACGTTACAGCAGATGGAAGGTAGTTGATTTTCTCTCCCTCAAAGGCTTCAAAGCTCTTTTGTGAGCAAGCACGCTGGAAGCTTTGTTGAAGAGGAGAAACAATACC
*****CTCTCCCTCAAAGGCTTCCA*****
ppt-miR477c 20
.....TTTTCTCTCCCTCAAAGGC..... 1 21
.....TTTTCTCTCCCTCAAAGGCT..... 1 21
.....CTCTCCCTCAAAGGCTTCCA..... 2 21
.....CTCTCCCTCAAAGGCTTCCA..... 6 19
.....CTCTCCCTCAAAGGCTTCCAAGCT..... 4 24
.....CTCTCCCTCAAAGGCTTCCA..... 50 20
.....CTCTCCCTCAAAGGCTTCCAAGC..... 2 23
.....CTCTCCCTCAAAGGCTTCCAAC..... 9 22
.....CTCTCCCTCAAAGGCTTCCA..... 215 21
.....TCTCCCTCAAAGGCTTCCAAGCT..... 1 23
.....TCTCCCTCAAAGGCTTCCAAGC..... 5 22
.....TCTCCCTCAAAGGCTTCCAAC..... 5 21
.....TCTCCCTCAAAGGCTTCCA..... 106 20
.....TCTCCCTCAAAGGCTTCCA..... 22 19
.....TCCCTCAAAGGCTTCCAAC..... 5 19
.....TCCCTCAAAGGCTTCCAAGCT..... 1 21
.....GCTGGAAGCTTTTGTGAA..... 1 19
.....GCTGGAAGCTTTTGTGAAGGAA..... 6 24
.....CTGGAAGCTTTTGTGAAGGAA..... 20 23
.....CTGGAAGCTTTTGTGAAGGAA..... 2 21
.....TGGAAGCTTTTGTGAAGGAA..... 1 22
.....TGGAAGCTTTTGTGAAGGAGG..... 1 23
.....GGAAGCTTTTGTGAAGGAA..... 620 21
.....GGAAGCTTTTGTGAAGGAA..... 13 19
.....GAAGCTTTTGTGAAGGAA..... 2 19
.....GAAGCTTTTGTGAAGGAA..... 89 20
.....GAAGCTTTTGTGAAGGAA..... 9 21
.....AAGCTTTTGTGAAGGAA..... 1 19
.....TCTTTGTGAAGGAGGAA..... 4 20
.....TCTTTGTGAAGGAGGAA..... 25 21
.....CTTTGTGAAGGAGGAA..... 1 19
.....CTTTGTGAAGGAGGAAAC..... 1 21
.....TTTGTGAAGGAGGAAACA..... 1 21

```

```

>ppt-miR477f_MIMAT0004361_Physcomitrella_patens_miR477f
CTAGTGGCGAGCGAGTTCGATCTTGGCGGGATTGTGATATTCGGGTGTTGTTTCTCTCCCTCAAAGGCTTCCAACAACAGGAGGTTACAATCCATTGTGGTTATAACCCATAGTTGAGGTGTTTCTCTCTCTG
*****TCCCTCAAAGGCTTCCAACA*****
ppt-miR477f 21
.....TCTCCCTCAAAGGCTTCCAAC..... 5 21
.....TCTCCCTCAAAGGCTTCCA..... 106 20
.....TCTCCCTCAAAGGCTTCCA..... 22 19
.....TCCCTCAAAGGCTTCCAAC..... 5 19
.....TCCCTCAAAGGCTTCCAACA..... 9 23
.....TCCCTCAAAGGCTTCCAACA..... 26 20
.....TCCCTCAAAGGCTTCCAACA..... 14 22
.....TCCCTCAAAGGCTTCCAACA..... 183 21
.....CCCTCAAAGGCTTCCAACA..... 1 20
.....CCCTCAAAGGCTTCCAACA..... 3 22
.....CCCTCAAAGGCTTCCAACA..... 2 19
.....CCCTCAAAGGCTTCCAACA..... 1 21

```

```

>ppt-miR477g-5p_MIMAT0004362_Physcomitrella_patens_miR477g-5p
GAGAGGAAGAGATATGCTTCCGCGGAGTCTAATGGTTACAGGTTGTTGTTTCTCCCTCAAAGGCTTCCAACAACAGTCCGGAATTAACCTGTGAGCCATTACTGTTGAGGCTTCTGCTTTAGTCTCTCTCTG
*****TCCCTCAAAGGCTTCCAACA*****
ppt-miR477g-5p 21
.....TCTCCCTCAAAGGCTTCCAAC..... 5 21
.....TCTCCCTCAAAGGCTTCCA..... 106 20
.....TCTCCCTCAAAGGCTTCCA..... 22 19
.....TCCCTCAAAGGCTTCCAAC..... 5 19
.....TCCCTCAAAGGCTTCCAACA..... 9 23
.....TCCCTCAAAGGCTTCCAACA..... 26 20
.....TCCCTCAAAGGCTTCCAACA..... 14 22
.....TCCCTCAAAGGCTTCCAACA..... 183 21
.....CCCTCAAAGGCTTCCAACA..... 1 20
.....CCCTCAAAGGCTTCCAACA..... 3 22
.....CCCTCAAAGGCTTCCAACA..... 2 19
.....CCCTCAAAGGCTTCCAACA..... 1 21

```

```

>ppt-miR477g-3p_MIMAT0003902_Physcomitrella_patens_miR477g-3p
TCGGAATTAACCTGATCGGCCATTACTGTTGCAAGTGAATATTCTAGTTCTGCTGTTGGAAGCCTCTGTGGGAGCAGAAAGAACCTTGTGGAAGGCTTGAAGGCTTCTGCTTTAGTCTGCTGATCTA
*****GTTGGAAGCCTCTGTGGGAGA*****
ppt-miR477g-3p 21
.....GCTGTTGGAAGCCTCTGTGGGAGA..... 7 24
.....CTGTTGGAAGCCTCTGTGGGAGAC..... 1 24
.....CTGTTGGAAGCCTCTGTGGGAGA..... 67 23
.....CTGTTGGAAGCCTCTGTGGGAG..... 2 22
.....TGTGGAAGCCTCTGTGGGAGAC..... 2 23
.....TGTGGAAGCCTCTGTGGGAG..... 1 21
.....TGTGGAAGCCTCTGTGGGAGA..... 139 22
.....GTTGGAAGCCTCTGTGGGAGAC..... 14 22
.....GTTGGAAGCCTCTGTGGGAG..... 6 20
.....GTTGGAAGCCTCTGTGGGAGA..... 648 21
.....GTTGGAAGCCTCTGTGGGAG..... 2 19
.....TTGGAAGCCTCTGTGGGAGA..... 19 20
.....TGGAGCCTCTGTGGGAGA..... 5 19

```

```

>ppt-miR894_MIMAT0004365_Physcomitrella_patens_miR894
CTTCTTCTCCATAAATCAAATAATCAAAAAATAAACCAATACCTTCAACTCAAGCGTTTCCAGTCCGGTCCACCAATATGTTGATATGTGAAGTTTATTGATGAGAATGCACCGAGCACTTGGCTATGGAAG
*****CGTTTCACGTCGGGTTCACCA*****
ppt-miR894      20
.....GGTTTCACGTCGGGTTCACCA..... 1 22
.....CGTTTCACGTCGGGTTCACCA..... 1 19
.....CGTTTCACGTCGGGTTCACCA..... 2 20
.....CGTTTCACGTCGGGTTCACCA..... 1 22
.....CGTTTCACGTCGGGTTCACCA..... 102 21
.....GTTTCACGTCGGGTTCACCA..... 51 20
.....GTTTCACGTCGGGTTCACCAAT..... 1 23
.....GTTTCACGTCGGGTTCACCA..... 1 19
.....TTTCACGTCGGGTTCACCA..... 51 19

```

```

>ppt-miR896_MIMAT0004367_Physcomitrella_patens_miR896
GATTCTGGGTTGATCCCGCATGGTCTGGTCCCGGAATTGTAGATTGTGGCCGTGCAATTTGGCCGAGTGGTAAAGCGGCAGACTCGAAATCTGCTGGGTTTCCCGCGCAGGTTCAAATCTCGAGTTGACGACT
*****GTCAATTTGGCCGAGTGGTAAAGCG*****
ppt-miR896      25
.....ATTCTGGGTTGATCCCGCA..... 1 22
.....TTCTGGGTTGATCCCGCA..... 1 21
.....TCTGGGTTGATCCCGCA..... 1 20
.....TTCGATCCCGCATGGTCTG..... 1 22
.....TGGTCCCGGAATTGTAGATTG..... 1 23
.....GCCCGGAATTGTAGATTGTGGCC..... 2 24
.....GCCCGGAATTGTAGATTGTGGCC..... 1 24
.....GCCCGGAATTGTAGATTGTGGCC..... 2 21
.....GCCCGGAATTGTAGATTGTGGCC..... 9 23
.....GCCCGGAATTGTAGATTGTGGCC..... 23 22
.....ATTGTAGATTGTGGCCGCT..... 1 19
.....GTCAATTTGGCCGAGTGGTAAAGC..... 12 25
.....GTCAATTTGGCCGAGTGGT..... 80 20
.....GTCAATTTGGCCGAGTGGT..... 105 19
.....GTCAATTTGGCCGAGTGGTAAAG..... 144 23
.....GTCAATTTGGCCGAGTGGTAAAG..... 64 24
.....GTCAATTTGGCCGAGTGGTAAAG..... 123 21
.....GTCAATTTGGCCGAGTGGTAAAG..... 187 22
.....TCAATTTGGCCGAGTGGTAAAG..... 1 21
.....AATTTGGCCGAGTGGTAAAG..... 4 20
.....AATTTGGCCGAGTGGTAAAG..... 7 19
.....AATTTGGCCGAGTGGTAAAG..... 1 21
.....TTTGGCCGAGTGGTAAAG..... 2 19
.....TTTGGCCGAGTGGTAAAGC..... 1 20
.....TTGGCCGAGTGGTAAAGCGC..... 1 20
.....TCGAAATCTGCTGGGTTTTC..... 1 20
.....AATCTGCTGGGTTTCCCGCGCA..... 1 24
.....AATCTGCTGGGTTTCCCGCGC..... 1 22
.....ATCTGCTGGGTTTCCCGCGC..... 1 21
.....ATCTGCTGGGTTTCCCGCGCA..... 1 23
.....ATCTGCTGGGTTTCCCGCGC..... 1 22
.....TCTGCTGGGTTTCCCGCGCAG..... 1 23
.....TCTGCTGGGTTTCCCGCGCAGGT..... 1 25
.....TCTGCTGGGTTTCCCGCGCA..... 1 22
.....CTGCTGGGTTTCCCGCGCAGGT..... 2 24
.....CTGCTGGGTTTCCCGCGCAGG..... 1 23
.....TGCTGGGTTTCCCGCGCAGTT..... 1 24
.....TGCTGGGTTTCCCGCGCAGTTCA..... 1 26
.....TGCTGGGTTTCCCGCGCAG..... 1 22
.....CTGGGTTTCCCGCGCAGG..... 1 20
.....CTGGGTTTCCCGCGCAGTTCAA..... 1 26
.....TGGGTTTCCCGCGCAGTTTC..... 1 22
.....CGCGAGTTCAAATCTGCAGTT..... 1 24
.....GCGCAGTTCAAATCTGCAGT..... 1 22
.....GCGCAGTTCAAATCTGCAGT..... 11 23
.....GCGCAGTTCAAATCTGCAGT..... 1 20
.....GCGCAGTTCAAATCTGCAG..... 1 21
.....GCGCAGTTCAAATCTGCAGTTGA..... 2 25

```

```

>ppt-miR897_MIMAT0004368_Physcomitrella_patens_miR897
TCTTTCATGCTTAGCATTCAAATGACCAAGGTGTCGATGCCAAATGCCATCTTATCTTGATCAAGTGGAACTCAGCAAA*
*****TGATCAAGTGGAACTCAGCAAA*****
ppt-miR897      23
.....TTGATCAAGTGGAACTCAGCAAA..... 2 24
.....TGATCAAGTGGAACTCAGCAAA..... 3 22
.....TGATCAAGTGGAACTCAGCAAA..... 2 23
.....TGATCAAGTGGAACTCAGCAAA..... 1 24
.....TGATCAAGTGGAACTCAGC..... 1 20
.....AAGTGGAACTCAGCAATCGGC..... 2 24
.....AGTGGAACTCAGCAATCGGC..... 1 23
.....GAACTCAGCAATCGGCACCT..... 1 23
.....AGCAATCGGCACCTCAACT..... 1 22

```

```

>ppt-miR900-5p_MIMAT0004961_Physcomitrella_patens_miR900-5p
CCGACGTAGATGGCATGCAACTCCCACTTCGCAATGATACCGCTCTAAGATCGCGTCTTCCAGGTACAAGAACACAGCTCACCAGTAGTCGACCGTGGTGGAGCTGTTCTTGTACTGGGAAGACCACCAGCGAAG
*****TCCAGGTACAAGAACACAGC*****
ppt-miR900-5p  21
.....GGTCTTCCAGGTACAAGAAC..... 1 21
.....GTCTTCCAGGTACAAGAAC..... 11 20
.....GTCTTCCAGGTACAAGAAC..... 2 21
.....TCTTCCAGGTACAAGAAC..... 1 20
.....TCTTCCAGGTACAAGAAC..... 2 21
.....CTTCCAGGTACAAGAAC..... 1 19
.....TTCCAGGTACAAGAAC..... 1 19
.....TTCCAGGTACAAGAACACAG..... 3 21
.....TCCAGGTACAAGAACACAGC..... 15 21
.....TCCAGGTACAAGAACACAGCT..... 3 22
.....TCCAGGTACAAGAACACAGCTC..... 1 23
.....TCCAGGTACAAGAACACAG..... 1 19
.....TCCAGGTACAAGAACACAG..... 1 20
.....CCAGGTACAAGAACACAGCTCA..... 2 22
.....CCAGGTACAAGAACACAGCTC..... 2 20
.....CCAGGTACAAGAACACAGCTC..... 20 21
.....CAGGTACAAGAACACAGCTC..... 2 20
.....CAGGTACAAGAACACAGCTC..... 2 20
.....CAGGTACAAGAACACAGCTC..... 1 21
.....CAGGTACAAGAACACAGCTC..... 1 19

```

```

.....CAGGTACAAGAACACAGCTCA..... 22 21
.....AGGTACAAGAACACAGCTCAC..... 16 21
.....AGGTACAAGAACACAGCTCAC..... 3 22
.....AGGTACAAGAACACAGCTCA..... 27 20
.....AGGTACAAGAACACAGCTC..... 2 19
.....AGGTACAAGAACACAGCTCACCA..... 2 23
.....GGTACAAGAACACAGCTCACCA..... 1 22
.....TGGTGAGCTGTGTTCTGTACT..... 1 23
.....TGGTGAGCTGTGTTCTGTACT..... 2 21
.....GGTGAGCTGTGTTCTGTACTG..... 1 23
.....GTGAGCTGTGTTCTGTACT..... 1 19
.....TGAGCTGTGTTCTGTACTGGGA..... 2 24
.....TGAGCTGTGTTCTGTACTGG..... 7 22
.....TGAGCTGTGTTCTGTACTGGG..... 2 23
.....TGAGCTGTGTTCTGTACTG..... 1 21
.....GAGCTGTGTTCTGTACTGG..... 12 21
.....AGCTGTGTTCTGTACTGG..... 25 20
.....AGCTGTGTTCTGTACTG..... 1 19
.....AGCTGTGTTCTGTACTGGGAAG..... 1 24
.....AGCTGTGTTCTGTACTGGGA..... 11 22
.....AGCTGTGTTCTGTACTGGGA..... 4 23
.....AGCTGTGTTCTGTACTGGG..... 5 21
.....GCTGTGTTCTGTACTGGGA..... 8 21
.....GCTGTGTTCTGTACTGGGA..... 1 22
.....GCTGTGTTCTGTACTGGGAAGA..... 1 24
.....CTGTGTTCTGTACTGGGA..... 1 21
.....CTGTGTTCTGTACTGGGA..... 2 20
.....TGTTGTTCTGTACTGGGAAG..... 14 21
.....TGTTGTTCTGTACTGGGA..... 1 19
.....GTGTTCTGTACTGGGAAGA..... 2 21
.....TGTTCTGTACTGGGAAG..... 1 19

```

```

>ppt-miR900-3p_MIMAT0004370_Physcomitrella_patens_miR900-3p
AAGATCGCGTCTTCCAGGTACAAGAACACAGCTCACAGTAGTCGACGCTGGGAGCTGTGTTCTGTACTGGGAAGCACCCAGGGAAGAATAAGAATGGCAGTTGGAATCCGAAACAGGAAGA
*****TGTTCTGTACTGGGAAG***** ppt-miR900-3p 21
.....GGTCTTCCAGGTACAAGAAC..... 1 21
.....GTCTTCCAGGTACAAGAAC..... 11 20
.....GTCTTCCAGGTACAAGAACA..... 2 21
.....TCTTCCAGGTACAAGAACA..... 1 20
.....TCTTCCAGGTACAAGAACA..... 2 21
.....CTTCCAGGTACAAGAACA..... 1 19
.....TTCCAGGTACAAGAACA..... 1 19
.....TTCCAGGTACAAGAACA..... 3 21
.....TTCCAGGTACAAGAACA..... 15 21
.....TCCAGGTACAAGAACA..... 3 22
.....TCCAGGTACAAGAACA..... 1 23
.....TCCAGGTACAAGAACA..... 1 19
.....TCCAGGTACAAGAACA..... 1 20
.....CCAGGTACAAGAACA..... 2 22
.....CCAGGTACAAGAACA..... 2 20
.....CCAGGTACAAGAACA..... 20 21
.....CAGGTACAAGAACA..... 2 20
.....CAGGTACAAGAACA..... 2 22
.....CAGGTACAAGAACA..... 1 19
.....CAGGTACAAGAACA..... 22 21
.....AGGTACAAGAACA..... 16 21
.....AGGTACAAGAACA..... 3 22
.....AGGTACAAGAACA..... 27 20
.....AGGTACAAGAACA..... 2 19
.....AGGTACAAGAACA..... 2 23
.....GGTACAAGAACA..... 1 22
.....TGGTGAGCTGTGTTCTGTACT..... 1 23
.....TGGTGAGCTGTGTTCTGTACT..... 2 21
.....GGTGAGCTGTGTTCTGTACTG..... 1 23
.....GTGAGCTGTGTTCTGTACT..... 1 19
.....TGAGCTGTGTTCTGTACTGGGA..... 2 24
.....TGAGCTGTGTTCTGTACTGG..... 7 22
.....TGAGCTGTGTTCTGTACTGGG..... 2 23
.....GAGCTGTGTTCTGTACTGG..... 1 21
.....GAGCTGTGTTCTGTACTGG..... 12 21
.....AGCTGTGTTCTGTACTGG..... 25 20
.....AGCTGTGTTCTGTACTG..... 1 19
.....AGCTGTGTTCTGTACTGGGAAG..... 1 24
.....AGCTGTGTTCTGTACTGGGA..... 11 22
.....AGCTGTGTTCTGTACTGGGA..... 4 23
.....AGCTGTGTTCTGTACTGGG..... 5 21
.....GCTGTGTTCTGTACTGGGA..... 8 21
.....GCTGTGTTCTGTACTGGGA..... 1 22
.....GCTGTGTTCTGTACTGGGAAGA..... 1 24
.....CTGTGTTCTGTACTGGGA..... 1 21
.....CTGTGTTCTGTACTGGGA..... 2 20
.....TGTTCTGTACTGGGAAG..... 14 21
.....TGTTCTGTACTGGGA..... 1 19
.....GTGTTCTGTACTGGGAAGA..... 2 21
.....TGTTCTGTACTGGGAAG..... 1 19

```

```

>ppt-miR902b-5p_MIMAT0004963_Physcomitrella_patens_miR902b-5p
AGTGTTCGAGGAGTATGAGGAGATGGAGAGCTGCAGACTGTTTCTTCTAGCCTATGATGCAGATCTTCATCTGTTGTTATGTTCTCATGTTGATACATAACAGACGAAGGTCGCATACGCAAGAGGA
*****TATGATGCAGATCTTCATCT***** ppt-miR902b-5p 21
.....TCCTTAGCCTATGATGCAGA..... 1 21
.....TAGCCTATGATGCAGATCTTC..... 12 22
.....AGCCTATGATGCAGATCTTCATCT..... 1 25
.....AGCCTATGATGCAGATCTTCATCT..... 1 22
.....CTATGATGCAGATCTTCATCTG..... 1 23
.....CTATGATGCAGATCTTCATCT..... 1 20
.....CTATGATGCAGATCTTCATCT..... 1 22
.....TATGATGCAGATCTTCATCT..... 33 19
.....TATGATGCAGATCTTCATCTGTT..... 1 24
.....TATGATGCAGATCTTCATCTG..... 66 22
.....TATGATGCAGATCTTCATCT..... 413 21
.....TATGATGCAGATCTTCATCT..... 66 20

```

```

.....ATGATGCAGATTCCTCATCT..... 8 20
.....ATGATGCAGATTCCTCATC..... 1 19
.....TGATGCAGATTCCTCATCTG..... 1 20
.....TTTGTATCGTCTCATGGTACAT..... 1 26
.....AGACGAAGGCTGCATCATAG..... 3 21
.....AGACGAAGGCTGCATCATATA..... 1 20
.....GACGAAGGCTGCATCATAGC..... 4 21
.....GACGAAGGCTGCATCATAG..... 1 20
.....ACGAAGGCTGCATCATAGC..... 98 20
.....ACGAAGGCTGCATCATAG..... 5 19
.....CGAAGGCTGCATCATAG..... 4 19

```

```

>ppt-miR536b_MIMAT0004378_Physcomitrella_patens_miR536b
GCATCATTGGTAGTGTCAAACCTATTCTCCCGAGTTGTAGCGGAATGATACCAGAAATTCGTGCCAAGCTGTGTGCAACCAAGGGGTTTGTACTTAAAGTCCACATGGGAGGCGTCCCTACCAAGCACACCATGGCT
*****TTTCGTGCCAAGCTGTGTGCAAC***** ppt-miR536b 22
.....AATTCGTGCCAAGCTGTGTGCAACC..... 4 25
.....AATTCGTGCCAAGCTGTGTGCAAC..... 6 24
.....ATTTCGTGCCAAGCTGTGTGCAAC..... 5 23
.....TTTCGTGCCAAGCTGTGTGCAAC..... 1993 21
.....TTTCGTGCCAAGCTGTGTGCA..... 4 19
.....TTTCGTGCCAAGCTGTGTGCA..... 72 20
.....TTTCGTGCCAAGCTGTGTGCAACCA..... 10 24
.....TTTCGTGCCAAGCTGTGTGCAACC..... 301 23
.....TTTCGTGCCAAGCTGTGTGCAAC..... 17988 22
.....TCGTGCCAAGCTGTGTGCAACC..... 8297 22
.....TCGTGCCAAGCTGTGTGCA..... 37 19
.....TCGTGCCAAGCTGTGTGCAAC..... 10950 21
.....TCGTGCCAAGCTGTGTGCAACCA..... 8 23
.....TCGTGCCAAGCTGTGTGCAAC..... 1051 20
.....CGTGCCAAGCTGTGTGCAAC..... 247 20
.....CGTGCCAAGCTGTGTGCAAC..... 24 19
.....CGTGCCAAGCTGTGTGCAACC..... 303 21
.....GTGC AAGCTGTGTGCAAC..... 303 19
.....GTGC AAGCTGTGTGCAACC..... 272 20
.....TGCCAAGCTGTGTGCAACC..... 73 19
.....TGCCAAGCTGTGTGCAACCAAG..... 2 22
.....AAGCTGTGTGCAACCAAGGG..... 1 21

```

```

>ppt-miR904a_MIMAT0004379_Physcomitrella_patens_miR904a
CTTGGAGCGATGTTGGAGTTCCTTCGGTGTGGTTGCAATATTTGTGATGCTAATATGGTCTTGTCAATGTTTAGGGGCAAGGCCGCTATTATGCAGATGCTTGGTAAAGCTTATGCTTGTACAACCTTTTGTATTGGC
*****TCTTGTCAATGTTTAGGGGCA***** ppt-miR904a 21
.....TGGTCTTGTCAATGTTTAGGG..... 1 21
.....TGGTCTTGTCAATGTTTAGGG..... 1 20
.....TCTTGTCAATGTTTAGGGGCA..... 442 22
.....TCTTGTCAATGTTTAGGGGCAAG..... 9 24
.....TCTTGTCAATGTTTAGGGG..... 7 19
.....TCTTGTCAATGTTTAGGGGCA..... 9 23
.....TCTTGTCAATGTTTAGGGGC..... 10 20
.....TCTTGTCAATGTTTAGGGGCA..... 6743 21
.....CTTGTCAATGTTTAGGGGCA..... 121 21
.....CTTGTCAATGTTTAGGGGC..... 6 19
.....CTTGTCAATGTTTAGGGGCAAG..... 4 23
.....CTTGTCAATGTTTAGGGGCA..... 2602 20
.....CTTGTCAATGTTTAGGGGCA..... 1 22
.....TTGTCAATGTTTAGGGGCA..... 75 19
.....TTGTCAATGTTTAGGGGCA..... 28 20
.....TGTCAATGTTTAGGGGCA..... 2 19

```

```

>ppt-miR904b_MIMAT0004380_Physcomitrella_patens_miR904b
TACTCGTCATCTTGGAGCGATGTTGTGTCATGATGGCGGATTTTGTGATGCTAATACGGTCTTGTCAATGTTTAGGGGCAAGGCCAAGCTATGCAACATCCCTGGTGGAGCTTGTATCGCGTAAAGTGTGTAGTGC
*****TCTTGTCAATGTTTAGGGGCA***** ppt-miR904b 21
.....TCTTGTCAATGTTTAGGGGCA..... 442 22
.....TCTTGTCAATGTTTAGGGGCAAG..... 9 24
.....TCTTGTCAATGTTTAGGGG..... 7 19
.....TCTTGTCAATGTTTAGGGGCA..... 9 23
.....TCTTGTCAATGTTTAGGGGC..... 10 20
.....TCTTGTCAATGTTTAGGGGCA..... 6743 21
.....CTTGTCAATGTTTAGGGGCA..... 121 21
.....CTTGTCAATGTTTAGGGGC..... 6 19
.....CTTGTCAATGTTTAGGGGCAAG..... 4 23
.....CTTGTCAATGTTTAGGGGCA..... 2602 20
.....CTTGTCAATGTTTAGGGGCA..... 1 22
.....TTGTCAATGTTTAGGGGCA..... 75 19
.....TTGTCAATGTTTAGGGGCA..... 28 20
.....TGTCAATGTTTAGGGGCA..... 2 19
.....GGTGCAACTATGCAACATCCCTGG..... 1 24

```

```

>ppt-miR898b_MIMAT0004381_Physcomitrella_patens_miR898b
ATTCTAATCTACTGCAGAAGTACAGATTACATCTGCTTGTGTCATTTCCGGCATCTTGTGTGCACTACTAGTACGCCGCTAGTTGCAGGCATTCCGGGTGCAGCAACTGACCGGAAGACTTTTCCAGAGTGT
*****TTGCTGTGCACTACTAGTAC***** ppt-miR898b 21
.....TCCGGCATCTTGTGCTACT..... 1 21
.....CATCTTGTGCTGCACTACTTA..... 1 21
.....ATCTTGTGCTGCACTACTAGTAC..... 1 24
.....ATCTTGTGCTGCACTACTAGTACG..... 1 25
.....ATCTTGTGCTGCACTACTTA..... 1 20
.....ATCTTGTGCTGCACTACTAG..... 90 21
.....ATCTTGTGCTGCACTACTAGT..... 11 22
.....TCTTGTGCTGCACTACTAGT..... 70 21
.....TCTTGTGCTGCACTACTAGTAC..... 2 23
.....TCTTGTGCTGCACTACTAG..... 33 20
.....TCTTGTGCTGCACTACTTA..... 1 19
.....CTTGTGCTGCACTACTAGTA..... 1 21
.....CTTGTGCTGCACTACTAGTACG..... 2 23
.....CTTGTGCTGCACTACTAGTAC..... 8 22
.....CTTGTGCTGCACTACTAGT..... 2 20
.....TTGCTGTGCACTACTAGTA..... 367 20
.....TTGCTGTGCACTACTAGTAC..... 5033 21
.....TTGCTGTGCACTACTAGTACG..... 10 23
.....TTGCTGTGCACTACTAGT..... 7 19

```



```

.....TTGCTGGCACTACTAGTACG..... 554 22
.....TGCTGGCACTACTAGTA..... 17 19
.....TGCTGGCACTACTAGTACGCG..... 5 23
.....TGCTGGCACTACTAGTACGC..... 1 22
.....TGCTGGCACTACTAGTAC..... 222 20
.....TGCTGGCACTACTAGTACG..... 637 21
.....GCTGGCACTACTAGTAC..... 21 19
.....GCTGGCACTACTAGTACGCG..... 1 22
.....GCTGGCACTACTAGTACG..... 5 20
.....TGCTGGCACTACTAGTACGCG..... 1 20
.....ACGCGGTAGTTGAGGCATT..... 1 21

```

```

>ppt-miR898a_MIMAT0004382_Physcomitrella_patens_miR898a
ATTTTCATTTCGAGCGAAGCTTAGCTACACCAAACTCTCTGTTGTTCCGGCGTATGCTGGCACTACTAGTACACGCGTATCGGTTGCACTCCAGATGTAGCAATTGAAACGAAGATATTCTGGAAAGTT
*****TTGCTGGCACTACTAGTAC*****
.....TCCGCGTATTGCTGGCACT..... ppt-miR898a 21
.....CGGCGTATTGCTGGCACTAC..... 1 21
.....GTATTGCTGGCACTACTAG..... 4 21
.....TATTGCTGGCACTACTAGTA..... 1 22
.....ATTGCTGGCACTACTAGTAC..... 1 22
.....TTGCTGGCACTACTAGTACAC..... 6 23
.....TTGCTGGCACTACTAGTA..... 367 20
.....TTGCTGGCACTACTAGTAC..... 5033 21
.....TTGCTGGCACTACTAGTACA..... 1768 22
.....TTGCTGGCACTACTAGT..... 7 19
.....TTGCTGGCACTACTAGTACACGC..... 1 25
.....TGCTGGCACTACTAGTA..... 17 19
.....TGCTGGCACTACTAGTACA..... 76 21
.....TGCTGGCACTACTAGTAC..... 222 20
.....TGCTGGCACTACTAGTACAC..... 2 22
.....GCTGGCACTACTAGTAC..... 21 19
.....GCTGGCACTACTAGTACA..... 6 20
.....ACTACTAGTACACGCGTATCG..... 1 22
.....ACTACTAGTACACGCGTATCGGTT..... 1 26

```

```

>ppt-miR408b_MIMAT0005050_Physcomitrella_patens_miR408b
CCAGCGTGAGGCAATGCATGACAACAGCATGCCAAGAGGCTCTGAGGGTGTTCCTCATGCACCTCTCCCTGGCTCCCTACATAGCTGCCATTCCTGTCTGCCACTTTCTGGATTGTTGCTGCTGCT
*****TGCACTGCCTCTCCCTGGCT*****
.....CCAGCGTGAGGCAATGCATGA..... ppt-miR408b 21
.....CCAGCGTGAGGCAATGCATGAC..... 12 21
.....CCAGCGTGAGGCAATGCATG..... 1 22
.....CAGCGTGAGGCAATGCATGACA..... 1 20
.....CAGCGTGAGGCAATGCATGA..... 50 20
.....CAGCGTGAGGCAATGCATGAC..... 2 21
.....AGCGTGAGGCAATGCATGA..... 2 19
.....CGTGAGGCAATGCATGACA..... 1 19
.....ATGCACTGCCTCTCCCTGGCT..... 1 22
.....ATGCACTGCCTCTCCCTGGC..... 2 21
.....TGCACTGCCTCTCCCTGGCTCC..... 1 24
.....TGCACTGCCTCTCCCTGGCT..... 11 21
.....TGCACTGCCTCTCCCTGGCTC..... 1 23
.....TGCACTGCCTCTCCCTGGCT..... 4 22

```

```

>ppt-miR477d_MIMAT0005051_Physcomitrella_patens_miR477d
GCCGTCGATTAATCATCTGGCTGTGGAAGTTGATTTCGATTAACAGATTGCTGTTCTCTCCCTCAAAGGCTTCCAACACAGTACTTGGCTGTTTACCAGCAAGCTAAGGCCGCTCCAGATGTAGAA
*****CTCTCCCTCAAAGGCTTCCA*****
.....CTCTCCCTCAAAGGCTTCCA..... ppt-miR477d 20
.....CTCTCCCTCAAAGGCTTCC..... 2 21
.....CTCTCCCTCAAAGGCTTCC..... 6 19
.....CTCTCCCTCAAAGGCTTCCA..... 50 20
.....CTCTCCCTCAAAGGCTTCCAAC..... 9 22
.....CTCTCCCTCAAAGGCTTCCA..... 215 21
.....TCTCCCTCAAAGGCTTCCAAC..... 5 21
.....TCTCCCTCAAAGGCTTCCA..... 106 20
.....TCTCCCTCAAAGGCTTCCA..... 22 19
.....TCCCTCAAAGGCTTCCAAC..... 5 19
.....TCCCTCAAAGGCTTCCAACAAC..... 9 23
.....TCCCTCAAAGGCTTCCAACA..... 26 20
.....TCCCTCAAAGGCTTCCAACAAC..... 14 22
.....TCCCTCAAAGGCTTCCAACA..... 183 21
.....CCCTCAAAGGCTTCCAACA..... 1 20
.....CCCTCAAAGGCTTCCAACAAC..... 3 22
.....CCCTCAAAGGCTTCCAACA..... 2 19
.....CCCTCAAAGGCTTCCAACAAC..... 1 21

```

```

>ppt-miR477e_MIMAT0005052_Physcomitrella_patens_miR477e
GTTTGGCGTTGGAAGTATCCGGTGTGATGAGAAGATTCCGAAAGCGTGTGCTATCTCTCCCTCAAAGGCTTCCAACATCAGTGTAGAAGCCTTGCTAGAAGCCTTTGTTGGGAGAGGGGAAACAACGCCTTG
*****CTCTCCCTCAAAGGCTTCCA*****
.....CTCTCCCTCAAAGGCTTCC..... ppt-miR477e 20
.....CTCTCCCTCAAAGGCTTCCA..... 6 19
.....CTCTCCCTCAAAGGCTTCCA..... 50 20
.....CTCTCCCTCAAAGGCTTCCAAC..... 9 22
.....CTCTCCCTCAAAGGCTTCCA..... 215 21
.....TCTCCCTCAAAGGCTTCCAAC..... 5 21
.....TCTCCCTCAAAGGCTTCCA..... 106 20
.....TCTCCCTCAAAGGCTTCCA..... 22 19
.....TCCCTCAAAGGCTTCCAAC..... 5 19
.....TCCCTCAAAGGCTTCCAACA..... 26 20
.....TCCCTCAAAGGCTTCCAACATCA..... 1 23
.....TCCCTCAAAGGCTTCCAACAT..... 2 21
.....CCCTCAAAGGCTTCCAACA..... 2 19
.....CATCAGGTGTAGAAGCCTTGCT..... 4 22
.....TCAGGTGTAGAAGCCTTGCT..... 1 20
.....TAGAAGCCTTTGTTGGGAGAG..... 1 20
.....AGAAGCCTTTGTTGGGAGAGG..... 851 21
.....AGAAGCCTTTGTTGGGAGAG..... 9 19
.....AGAAGCCTTTGTTGGGAGAGG..... 5 20
.....GAAGCCTTTGTTGGGAGAGG..... 13 20
.....AAGCCTTTGTTGGGAGAGG..... 11 19
.....TTTGTGGGAGAGGGGAAACA..... 1 21
.....TTTGTGGGAGAGGGGAAAC..... 1 20

```

```

>ppt-miR533c_MIMAT0005061_Physcomitrella_patens_miR533c
GATTGGTGACCTTGAAGTGGTCAAGGAAAGCCAAAGTCCAAAGTTCACACTCTTCTCTCACAGCTGACAGCTCTCTGTATCTCTCCCTAGTATATGTCTACAGCTGGTGACGCAACGAGGTTAAACAGCTA
*****CTCACAGCTGACAGCTCTC*****
ppt-miR533c 21
.....TGCTCTCACAGCTGACAGCTCTC..... 8 25
.....GCTCTCACAGCTGACAGCTCTC..... 2 24
.....CTCACAGCTGACAGCTCTC..... 1 19
.....CTCACAGCTGACAGCTCTCT..... 2 22
.....CTCACAGCTGACAGCTCT..... 4 20
.....CTCACAGCTGACAGCTCTCT..... 327 21
.....TCACAGCTGACAGCTCTCT..... 1 21
.....TCACAGCTGACAGCTCTC..... 68 20
.....CACAGCTGACAGCTCTC..... 1 19
.....ACAGCTGACAGCTCTCT..... 2 19

```

```

>ppt-miR536d_MIMAT0005064_Physcomitrella_patens_miR536d
TCTACTCTGGTGTGATGTTGAACCACTCCACCCTGTAGCGGAAAGATGTTAGAAATTCGTGCAAGCTGTGTGCAACCAAGGGGTTTGTACTTCAAATCCACATCGGAGGAGGTCCTACCAGTACACCATGAAT
*****ATTTCGTGCAAGCTGTGTGCAAC*****
ppt-miR536d 22
.....ATTTCGTGCAAGCTGTGTGCAA..... 1 23
.....TTTCGTGCAAGCTGTGTGCAAC..... 7 23
.....TTTCGTGCAAGCTGTGTGCAA..... 4 22
.....TTTCGTGCAAGCTGTGTGCAA..... 1993 21
.....TTTCGTGCAAGCTGTGTGCA..... 4 19
.....TTTCGTGCAAGCTGTGTGCA..... 72 20
.....TTTCGTGCAAGCTGTGTGCAACCA..... 10 24
.....TTTCGTGCAAGCTGTGTGCAACCC..... 301 23
.....TTTCGTGCAAGCTGTGTGCAAC..... 17988 22
.....TCGTGCAAGCTGTGTGCAACCC..... 8297 22
.....TCGTGCAAGCTGTGTGCA..... 37 19
.....TCGTGCAAGCTGTGTGCAAC..... 10950 21
.....TCGTGCAAGCTGTGTGCAACCA..... 8 23
.....TCGTGCAAGCTGTGTGCAAC..... 1051 20
.....CGTGCAAGCTGTGTGCAAC..... 247 20
.....CGTGCAAGCTGTGTGCAA..... 24 19
.....CGTGCAAGCTGTGTGCAACCC..... 303 21
.....GTGCAAGCTGTGTGCAAC..... 303 19
.....GTGCAAGCTGTGTGCAACCC..... 272 20
.....TGCAAGCTGTGTGCAACCC..... 73 19
.....TGCAAGCTGTGTGCAACCAAG..... 2 22
.....AAGCTGTGTGCAACCAAGGG..... 1 21

```

```

>ppt-miR536e_MIMAT0005065_Physcomitrella_patens_miR536e
GTCAATCTTCAAGTGTGATGATGTTGAACCACTCCACCCTGTAGCGGAAAGATGTTAGAAATTCGTGCAAGCTGTGTGCAACCAAGGGATTCCTACTCATGTTCTGCTGACTAGTATCGCCAGGACAAGCATGGCC
*****TTTCGTGCAAGCTGTGTGCAAC*****
ppt-miR536e 22
.....TTTCGTGCAAGCTGTGTGCAAC..... 7 23
.....TTTCGTGCAAGCTGTGTGCAA..... 4 22
.....TTTCGTGCAAGCTGTGTGCAA..... 1993 21
.....TTTCGTGCAAGCTGTGTGCA..... 4 19
.....TTTCGTGCAAGCTGTGTGCA..... 72 20
.....TTTCGTGCAAGCTGTGTGCAACCA..... 10 24
.....TTTCGTGCAAGCTGTGTGCAACCC..... 301 23
.....TTTCGTGCAAGCTGTGTGCAAC..... 17988 22
.....TCGTGCAAGCTGTGTGCAACCC..... 8297 22
.....TCGTGCAAGCTGTGTGCA..... 37 19
.....TCGTGCAAGCTGTGTGCAAC..... 10950 21
.....TCGTGCAAGCTGTGTGCAACCA..... 8 23
.....TCGTGCAAGCTGTGTGCAACCC..... 1051 20
.....CGTGCAAGCTGTGTGCAAC..... 247 20
.....CGTGCAAGCTGTGTGCAA..... 24 19
.....CGTGCAAGCTGTGTGCAACCC..... 303 21
.....GTGCAAGCTGTGTGCAAC..... 303 19
.....GTGCAAGCTGTGTGCAACCC..... 272 20
.....TGCAAGCTGTGTGCAACCC..... 73 19
.....TGCAAGCTGTGTGCAACCAAG..... 2 22
.....AAGCTGTGTGCAACCAAGGGA..... 1 21

```

```

>ppt-miR536f_MIMAT0005066_Physcomitrella_patens_miR536f
AGATATCGGTCGGTAGAGTTGAGGTTTGTTCACATGACCTTAGCTCTGTTTCCGAGCGCTTCTGCAAGCTGTGTGCATCAAGGGAATCTCACTTCTAACAGAAAGTTGCCCAAGAGTCGGAGCAAGACTGCA
*****TTTCGTGCAAGCTGTGTGCA*****
ppt-miR536f 20
.....TTTCGTGCAAGCTGTGTGCAT..... 7 21
.....TTTCGTGCAAGCTGTGTGCA..... 4 19
.....TTTCGTGCAAGCTGTGTGCA..... 72 20
.....TTTCGTGCAAGCTGTGTGCATCT..... 1 23
.....TTTCGTGCAAGCTGTGTGCATC..... 12 22
.....TCGTGCAAGCTGTGTGCAT..... 10 20
.....TCGTGCAAGCTGTGTGCA..... 37 19
.....TCGTGCAAGCTGTGTGCATC..... 6 21
.....CGTGCAAGCTGTGTGCAT..... 1 19

```

```

>ppt-miR537c_MIMAT0005067_Physcomitrella_patens_miR537c
TGATTGGAGCACCTCCAGATGTTCCAGATGTAATGAAACCGGTGCAAGCTCAAGCTCTGAGGTGTTTCTACAGGCTACATATGATAGATGGCTACCTGGATATACCAAGCTGGCTGTTGATTTTCATGTTTCAA
*****TTGAGGTGTTTCTACAGGCTA*****
ppt-miR537c 21
.....AACCGGTGCAAGCTCAAGCT..... 2 21
.....CTTCAAGCTCTTGAAGTGTTT..... 1 21
.....TTCAAGCTCTTGAAGTGTTTCT..... 51 22
.....TTCAAGCTCTTGAAGTGTTTCTAC..... 1 24
.....TTCAAGCTCTTGAAGTGTTTCT..... 170 21
.....TTCAAGCTCTTGAAGTGTTT..... 3 20
.....TCAAGCTCTTGAAGTGTTT..... 1 19
.....TCAAGCTCTTGAAGTGTTTCT..... 250 21
.....TCAAGCTCTTGAAGTGTTTCTA..... 1 22
.....TCAAGCTCTTGAAGTGTTTCTAC..... 1 23
.....TCAAGCTCTTGAAGTGTTTCT..... 3 20
.....AAGCTCTTGAAGTGTTTCT..... 7 19
.....CTTGAAGTGTTTCTACAGGCTAC..... 1 23
.....TTGAGGTGTTTCTACAGGCT..... 2 19
.....TTGAGGTGTTTCTACAGGCT..... 5 20
.....TTGAGGTGTTTCTACAGGCTA..... 26 21

```

```

>ppt-miR537d_MIMAT0005068_Physcomitrella_patens_miR537d
TTTATGAAAGTGACGAAATGTGTATGCTGTGATCGACGATTGGCGATGCTCATTTCCCTCTAGCTATGATGCAGATCTTCATCTGTTGAACGAAATTTCTTAGTGATGCAGACGAAGTCTGCATCATAGTCAAGGGGAGG
*****TTGAGGTGTTTCTACAGGCTA*****
.....ATCAGTAACCTTGAGGTGTT..... ppt-miR537d 21
.....ATCAGTAACCTTGAGGTGTTCT..... 1 19
.....TCAGTAACCTTGAGGTGTTCT..... 1 21
.....CTTGAGGTGTTTCTACAGGCTAC..... 1 23
.....TTGAGGTGTTTCTACAGGC..... 2 19
.....TTGAGGTGTTTCTACAGGCT..... 5 20
.....TTGAGGTGTTTCTACAGGCTA..... 26 21
.....TGAGGTGTTTCTACAGGCTACT..... 1 22

```

```

>ppt-miR902c-5p_MIMAT0005069_Physcomitrella_patens_miR902c-5p
TGTGTTTGCAGAAATGCTGTTGATGACTCTATTGGCGATGCTCATTTCCCTCTAGCTATGATGCAGATCTTCATCTGTTGAACGAAATTTCTTAGTGATGCAGACGAAGTCTGCATCATAGTCAAGGGGAGG
*****TATGATGCAGATCTTCATCT*****
.....TATGATGCAGATCTTCAT..... ppt-miR902c-5p 21
.....TATGATGCAGATCTTCATCTGTT..... 33 19
.....TATGATGCAGATCTTCATCTG..... 1 24
.....TATGATGCAGATCTTCATCTG..... 66 22
.....TATGATGCAGATCTTCATCT..... 413 21
.....TATGATGCAGATCTTCATCT..... 66 20
.....ATGATGCAGATCTTCATCT..... 8 20
.....ATGATGCAGATCTTCATCT..... 1 19
.....TGATGCAGATCTTCATCTG..... 1 20
.....AGCGAAGTCTGCATCATAG..... 3 21
.....AGCGAAGTCTGCATCATA..... 1 20
.....GACGAAGTCTGCATCATAG..... 1 20
.....ACGAAGTCTGCATCATAGT..... 100 20
.....ACGAAGTCTGCATCATAGTC..... 2 21
.....ACGAAGTCTGCATCATAG..... 5 19
.....ACGAAGTCTGCATCATAGCA..... 1 22
.....CGAAGTCTGCATCATAGT..... 4 19

```

```

>ppt-miR902e-5p_MIMAT0005073_Physcomitrella_patens_miR902e-5p
GTTGCAGACGTTTGTGGTGACGTTTGGACAGCGTCCGCTCTCATTTCCCTCTAGCTATGATGCAGATCTTCATCTGTTGCTGTGATGCTTGACAGAGTCTGCATCATAGTCAAGGGGAGG
*****TATGATGCAGATCTTCATCT*****
.....TCCGCTAGCTATGATGCAG..... ppt-miR902e-5p 21
.....TAGTCTATGATGCAGATCTTC..... 8 22
.....AGTCTATGATGCAGATCTTC..... 1 22
.....CTATGATGCAGATCTTCATCTG..... 1 23
.....CTATGATGCAGATCTTCATCT..... 1 20
.....CTATGATGCAGATCTTCATCT..... 1 22
.....TATGATGCAGATCTTCATCT..... 33 19
.....TATGATGCAGATCTTCATCTGTT..... 1 24
.....TATGATGCAGATCTTCATCTG..... 66 22
.....TATGATGCAGATCTTCATCT..... 413 21
.....TATGATGCAGATCTTCATCT..... 66 20
.....ATGATGCAGATCTTCATCT..... 8 20
.....ATGATGCAGATCTTCATCT..... 1 19
.....TGATGCAGATCTTCATCTG..... 1 20
.....AGCGAAGTCTGCATCATAG..... 3 21
.....AGCGAAGTCTGCATCATA..... 1 20
.....GACGAAGTCTGCATCATAG..... 1 20
.....ACGAAGTCTGCATCATAGT..... 100 20
.....ACGAAGTCTGCATCATAGTC..... 2 21
.....ACGAAGTCTGCATCATAG..... 5 19
.....ACGAAGTCTGCATCATAGCA..... 1 22
.....CGAAGTCTGCATCATAGT..... 4 19

```

```

>ppt-miR902g-5p_MIMAT0005077_Physcomitrella_patens_miR902g-5p
TGTGTTGTTTCAAGCGCTCTAGGTGGTAGCAGTTTGTTCATTTCCCTCTAGCTATGATGCAGATCTTCATCTGTTAGCTGAATCTGCTCAGTGTTCAGTGTACAGACGAAGTCTGCATCATAGTCAA
*****TATGATGCAGATCTTCATCT*****
.....TCCGCTAGCTATGATGCAG..... ppt-miR902g-5p 21
.....TAGTCTATGATGCAGATCTTC..... 8 22
.....AGTCTATGATGCAGATCTTC..... 1 22
.....CTATGATGCAGATCTTCATCTG..... 1 23
.....CTATGATGCAGATCTTCATCT..... 1 20
.....CTATGATGCAGATCTTCATCT..... 1 22
.....TATGATGCAGATCTTCATCT..... 33 19
.....TATGATGCAGATCTTCATCTGTT..... 1 24
.....TATGATGCAGATCTTCATCTG..... 66 22
.....TATGATGCAGATCTTCATCT..... 413 21
.....TATGATGCAGATCTTCATCT..... 66 20
.....ATGATGCAGATCTTCATCT..... 8 20
.....ATGATGCAGATCTTCATCT..... 1 19
.....TGATGCAGATCTTCATCTG..... 1 20
.....AGCGAAGTCTGCATCATAG..... 3 21
.....AGCGAAGTCTGCATCATA..... 1 20
.....GACGAAGTCTGCATCATAG..... 1 20
.....ACGAAGTCTGCATCATAGT..... 100 20
.....ACGAAGTCTGCATCATAGTC..... 2 21
.....ACGAAGTCTGCATCATAG..... 5 19
.....ACGAAGTCTGCATCATAGCA..... 1 22
.....CGAAGTCTGCATCATAGT..... 4 19

```

```

>ppt-miR902g-3p_MIMAT0005078_Physcomitrella_patens_miR902g-3p
TCTATGATGCAGATCTTCATCTGTTAGCTGAATCTGCTCAGTGTTCAGTGTACAGACGAAGTCTGCATCATAGTCAAGGAAATAACATTATAGATTATAGCAGCTCAATACCAACTTTGTCTAGGAA
*****ACGAAGTCTGCATCATAGT*****
.....CTATGATGCAGATCTTCATCTG..... ppt-miR902g-3p 20
.....CTATGATGCAGATCTTCATCT..... 1 23
.....CTATGATGCAGATCTTCATCT..... 1 20
.....TATGATGCAGATCTTCATCT..... 1 22
.....TATGATGCAGATCTTCATCT..... 33 19
.....TATGATGCAGATCTTCATCTGTT..... 1 24
.....TATGATGCAGATCTTCATCTG..... 66 22
.....TATGATGCAGATCTTCATCT..... 413 21
.....TATGATGCAGATCTTCATCT..... 66 20
.....ATGATGCAGATCTTCATCT..... 8 20
.....ATGATGCAGATCTTCATCT..... 8 20
.....ATGATGCAGATCTTCATCT..... 1 19

```

```

....TGATGCAGATTCCTCATCTG..... 1 20
.....AGACGAAGGCTGCATCATAG..... 3 21
.....AGACGAAGGCTGCATCATAG..... 1 20
.....GACGAAGGCTGCATCATAG..... 1 20
.....ACGAAGGCTGCATCATAGT..... 100 20
.....ACGAAGGCTGCATCATAGTC..... 2 21
.....ACGAAGGCTGCATCATAG..... 5 19
.....ACGAAGGCTGCATCATAGTCA..... 1 22
.....CGAAGGCTGCATCATAGT..... 4 19

```

```

>ppt-miR902h-5p_MIMAT0005079_Physcomitrella_patens_miR902h-5p
TTCAGTGTAGGTACCGAGTGACATCTCCGACCAACCACAAAATCGTGTGATCTAGATTATGATAGATTCTTCTATCGGAATGAATTCGATTAAAGAAGGGGTCTACATCATAAACTGGATGATTACGATT
*****TTATGATGTAGATTCTTCAT***** ppt-miR902h-5p 20
.....TCTAGATTATGATGTAGATT..... 1 20
.....TAGATTATGATGTAGATTCTT..... 2 21
.....TAGATTATGATGTAGATTCT..... 1 20
.....TTATGATGTAGATTCTTCATCTG..... 1 23
.....TTATGATGTAGATTCTTCAT..... 81 20
.....TTATGATGTAGATTCTTCATC..... 162 21
.....TTATGATGTAGATTCTTCATCTGG..... 1 24
.....TATGATGTAGATTCTTCATCT..... 1 21
.....TATGATGTAGATTCTTCAT..... 45 19
.....TATGATGTAGATTCTTCATC..... 63 20
.....ATGATGTAGATTCTTCATC..... 5 19
.....ATGATGTAGATTCTTCATCTGGAA..... 1 24
.....TGATGTAGATTCTTCATCTGG..... 1 21
.....TGATGTAGATTCTTCATCT..... 1 19
.....TGATGTAGATTCTTCATCTGGAAT..... 1 24
.....AGAAGAAGGGTCTACATCATAAAC..... 1 24
.....AGAAGGGTCTACATCATAAACT..... 2 22
.....AGAAGGGTCTACATCATAAAC..... 11 21
.....AGAAGGGTCTACATCATAAA..... 4 20

```

```

>ppt-miR902h-3p_MIMAT0005080_Physcomitrella_patens_miR902h-3p
ATCGTGTGATCTAGATTATGATGTAGATTCTTCATCTGGAATGAATTCGATTAAAGAAGGGGTCTACATCATAAACTGGATGATTACGATTGTTGGATAACAGCAGCACCTACGCTTCTAAATTTGCAGTAGGT
*****AGAAGGGTCTACATCATAAAC***** ppt-miR902h-3p 21
.....TCTAGATTATGATGTAGATT..... 1 20
.....TAGATTATGATGTAGATTCTT..... 2 21
.....TAGATTATGATGTAGATTCT..... 1 20
.....TTATGATGTAGATTCTTCATCTG..... 1 23
.....TTATGATGTAGATTCTTCAT..... 81 20
.....TTATGATGTAGATTCTTCATC..... 162 21
.....TTATGATGTAGATTCTTCATCTGG..... 1 24
.....TATGATGTAGATTCTTCATCT..... 1 21
.....TATGATGTAGATTCTTCAT..... 45 19
.....TATGATGTAGATTCTTCATC..... 63 20
.....ATGATGTAGATTCTTCATC..... 5 19
.....ATGATGTAGATTCTTCATCTGGAA..... 1 24
.....TGATGTAGATTCTTCATCTGG..... 1 21
.....TGATGTAGATTCTTCATCT..... 1 19
.....TGATGTAGATTCTTCATCTGGAAT..... 1 24
.....AGAAGAAGGGTCTACATCATAAAC..... 1 24
.....AGAAGGGTCTACATCATAAACT..... 2 22
.....AGAAGGGTCTACATCATAAAC..... 11 21
.....AGAAGGGTCTACATCATAAA..... 4 20

```

```

>ppt-miR1023a-5p_MIMAT0005102_Physcomitrella_patens_miR1023a-5p
GGAGGAGGTGGCCTTGGGGGTTGACGAGGGAGCGATTGGACCACCTTGCAGTTTCATGGCACACTCTCCATTTCTACCGTTCATCGAGCGGTTGATCGATTGGTTGCTGGTTGATTGATCGATCGATGGTCAGGAG
*****ACACTCTCCATTTCTCTAC***** ppt-miR1023a-5p 21
.....CACTCTCCATTTCTCTAC..... 1 23
.....CACTCTCCATTTCTCTA..... 69 20
.....CACTCTCCATTTCTCTACC..... 59 22
.....CACTCTCCATTTCTCTAC..... 1595 21
.....CACTCTCCATTTCTCT..... 24 19
.....CACTCTCCATTTCTCTAC..... 7 20
.....ACTCTCCATTTCTCTAC..... 3 19
.....ACTCTCCATTTCTCTACGGT..... 1 23

```

```

>ppt-miR1023a-3p_MIMAT0005103_Physcomitrella_patens_miR1023a-3p
ATGCAGCGGTTGATCGATTGGGTGCTGCTGTTGATTGATCGATGATGTCAGGAGTTGGAAGAATGGAGAGAGTGCATTTGGAATGCGGGGTTGACGAGCGGAGGGGTTCTGGAGTTAGTCGCAGTTTCCACCCAC
*****AGAATTTGGAGAGAGTGCAT***** ppt-miR1023a-3p 21
.....GGAAGAATTTGGAGAGAGTGCAT..... 1 24
.....GAAGAATTTGGAGAGAGTGCAT..... 4 23
.....GAAGAATTTGGAGAGAGTGCAT..... 1 22
.....AAGAATTTGGAGAGAGTGCAT..... 27 22
.....AAGAATTTGGAGAGAGTGCAT..... 3 23
.....AAGAATTTGGAGAGAGTGCAT..... 25 21
.....AGAATTTGGAGAGAGTGCAT..... 10 19
.....AGAATTTGGAGAGAGTGCAT..... 807 20
.....AGAATTTGGAGAGAGTGCAT..... 3022 21
.....AGAATTTGGAGAGAGTGCAT..... 121 22
.....GAGAATTTGGAGAGAGTGCAT..... 17 19
.....GAGAATTTGGAGAGAGTGCAT..... 1 21
.....GAGAATTTGGAGAGAGTGCAT..... 44 20
.....AGAATTTGGAGAGAGTGCAT..... 2 20
.....AGAATTTGGAGAGAGTGCAT..... 23 19

```

```

>ppt-miR1025_MIMAT0005111_Physcomitrella_patens_miR1025
TCTACCCACTCCGCTTCCCTGCTGTTGTGCGAGTGGGGGCTCGCCTGCTCTCTCTCCACACAACAAAGCTAAATAACTGACTCCTCTGACACACGCTCTGCTGCTGTTTCCGCGGTTGCGTTTGGCTGCTGC
*****TCCACACAACAAAGCTAAATAACTGACTCCTCTGACACACGCTCTGCTGCTGTTTCCGCGGTTGCGTTTGGCTGCTGC***** ppt-miR1025 21
.....CTTCTCTGCCACAACAAG..... 1 20
.....TTCTCTGCCACAACAAGC..... 13 21
.....TTCTCTGCCACAACAAG..... 240 20
.....TTCTCTGCCACAACAAG..... 18 19
.....TCTCTGCCACAACAAG..... 3 19
.....CTTCTGCCACAACAAGCTAAATA..... 1 24
.....CTTCTGCCACAACAAGCTAA..... 1 21
.....CTTCTGCCACAACAAGCTAA..... 1 23

```

```

.....TTCTGCCACAACAAGCTAATAA..... 2 23
.....TTCTGCCACAACAAGCTAA..... 1 20
.....TCTGCCACAACAAGCTAATAAC..... 2 23
.....CTGCCACAACAAGCTAATAAC..... 6 22
.....TGCCACAACAAGCTAATA..... 42 19
.....TGCCACAACAAGCTAATAA..... 31 20
.....TGCCACAACAAGCTAATAAC..... 928 21
.....TGCCACAACAAGCTAATAACT..... 8 22
.....GCCACAACAAGCTAATAAC..... 9 20
.....CCACAACAAGCTAATAAC..... 6 19
.....CACACAAGCTAATAACT..... 1 19
.....CAACAAGCTAATAACTCGAC..... 8 21
.....AACACAAGCTAATAACTCGAC..... 1 20
.....AACACAAGCTAATAACTCGACT..... 3 21

```

```

>ppt-miR1026b_MIMAT0005113_Physcomitrella_patens_miR1026b
CAATGATATGTGCATTCTCATATTCGAACTCAGGAACATAATTGAGACTCTCTGAACTCTGAGAAAGACTTGAGAGGACCTCTGCAACAACCTGTGGCAATTCATGCAGTTATAGCAGCATCTGCAGCGCGGTTCTC
*****TGAGAAAGACTTGAGAGGACA***** ppt-miR1026b 21
.....CTCTGAGAAAGACTTGAGAGGAC..... 1 23
.....TGAGAAAGACTTGAGAGGA..... 4 19
.....TGAGAAAGACTTGAGAGGAC..... 12 20
.....TGAGAAAGACTTGAGAGGACA..... 161 21
.....TGAGAAAGACTTGAGAGGAC..... 2 22
.....GAGAAAGACTTGAGAGGACA..... 1 20

```

```

>ppt-miR1027a_MIMAT0005114_Physcomitrella_patens_miR1027a
CGCTAGTGGAAATTTGGGAGAGCAGAAGTCAAGAGCAGATACTTAAGTCGAAGAGCATCTTCTATCTCTCTCCAATCTATTGATCGCCCTCCAATCTATCAGATCAATAGATTGGAAGAGCAGATCGAAAAATG
*****TTTCTATCTCTCTCCAATC***** ppt-miR1027a 21
.....CTTCTATCTCTCTCCAAT..... 1 21
.....TTTCTATCTCTCTCCAATC..... 70 21
.....TTTCTATCTCTCTCCAAT..... 3 20
.....TTCTATCTCTCTCCAAT..... 2 19
.....TTCTATCTCTCTCCAAT..... 10 21
.....TTCTATCTCTCTCCAATCT..... 1 20
.....TTCTATCTCTCTCCAATCTAT..... 1 23
.....TTCTATCTCTCTCCAATCTA..... 1 22
.....TCTATCTCTCTCCAATCTAT..... 2 22
.....TCTATCTCTCTCCAATCTA..... 28 21
.....TCTATCTCTCTCCAATCT..... 2 20
.....TATCTCTCTCTCCAATCTAT..... 1 20
.....TTCTCTCCAATCTATTGATC..... 2 21
.....TTCTCTCCAATCTATTGAT..... 1 20
.....TCTCTCCAATCTATTGAT..... 1 19
.....TCTCTCCAATCTATTGATCT..... 2 21
.....TCTCTCCAATCTATTGATCTGCC..... 2 24
.....TCTCTCCAATCTATTGATCTGC..... 2 21
.....TCAGATCAATAGATTGGAAGA..... 1 21
.....AGATCAATAGATTGGAAGAGC..... 1 21
.....ATAGATTGGAAGAGCAGATCGAAA..... 1 24
.....AGATTGGAAGAGCAGATCGAAAAA..... 1 24
.....AGATTGGAAGAGCAGATCGAAA..... 1 22
.....AGATTGGAAGAGCAGATCGAA..... 1 21
.....GATTGGAAGAGCAGATCGAAA..... 1 21
.....ATTGGAAGAGCAGATCGAAAA..... 2 21
.....TTGGAAGAGCAGATCGAAA..... 14 20
.....TTGGAAGAGCAGATCGAAA..... 5 19
.....TTGGAAGAGCAGATCGAAAAA..... 190 21
.....TTGGAAGAGCAGATCGAAAAAT..... 2 22
.....TGGAAAGAGCAGATCGAAAAAT..... 2 21

```

```

>ppt-miR1027b_MIMAT0005115_Physcomitrella_patens_miR1027b
CGCTAGTGGAAATTTGGGAGAGCAGAAGTCAAGAGCAGATACTTAAGTCGAAGAGCATCTTCTATCTCTCTCCAATCTATTGATCGCCCTCCAATCTATCAGATCAATAGATTGGAAGAGCAGATCGAAAAATG
*****TTTCTATCTCTCTCCAATC***** ppt-miR1027b 21
.....CTTCTATCTCTCTCCAAT..... 1 21
.....TTTCTATCTCTCTCCAATC..... 70 21
.....TTTCTATCTCTCTCCAAT..... 3 20
.....TTCTATCTCTCTCCAAT..... 2 19
.....TTCTATCTCTCTCCAATCT..... 10 21
.....TTCTATCTCTCTCCAATC..... 1 20
.....TTCTATCTCTCTCCAATCTAT..... 1 23
.....TTCTATCTCTCTCCAATCTA..... 1 22
.....TCTATCTCTCTCCAATCTAT..... 2 22
.....TCTATCTCTCTCCAATCTA..... 28 21
.....TCTATCTCTCTCCAATCT..... 2 20
.....TATCTCTCTCTCCAATCTAT..... 1 20
.....TTCTCTCCAATCTATTGATC..... 2 21
.....TTCTCTCCAATCTATTGAT..... 1 20
.....TCTCTCCAATCTATTGAT..... 1 19
.....TCTCTCCAATCTATTGATCT..... 2 21
.....TCTCTCCAATCTATTGATCTGCC..... 2 24
.....TCTCTCCAATCTATTGATCTGC..... 2 21
.....TCAGATCAATAGATTGGAAGA..... 1 21
.....AGATCAATAGATTGGAAGAGC..... 1 21
.....ATAGATTGGAAGAGCAGATCGAAA..... 1 24
.....AGATTGGAAGAGCAGATCGAAAAA..... 1 24
.....AGATTGGAAGAGCAGATCGAAA..... 1 22
.....AGATTGGAAGAGCAGATCGAA..... 1 21
.....GATTGGAAGAGCAGATCGAAA..... 1 21
.....ATTGGAAGAGCAGATCGAAAA..... 2 21
.....TTGGAAGAGCAGATCGAAA..... 14 20
.....TTGGAAGAGCAGATCGAAA..... 5 19
.....TTGGAAGAGCAGATCGAAAAA..... 190 21
.....TTGGAAGAGCAGATCGAAAAAT..... 2 22
.....TGGAAAGAGCAGATCGAAAAAT..... 2 21

```

```

>ppt-miR1030a_MIMAT0005123_Physcomitrella_patens_miR1030a
AATAGTATCTCTGAAATAGATGACAGCAAGTACGCAATTAAGCTGCACCGTCAACATTTCTGCATCTGCACCTGCACCAAAACCGCACTTTGAGGTTGTGGAATTCGCACTCACACCCAGCATTTCGAAGAGTG
*****TCTGCATCTGCACCTGCACCA***** ppt-miR1030a 21
.....TCTGCATCTGCACCTGCACCA..... 31 21

```

```

.....TCTGCATCTGCACCTGCACCAA..... 1 23
.....TCTGCATCTGCACCTGCACC..... 1 20
.....TCTGCATCTGCACCTGCACC..... 1 19
.....TCTGCATCTGCACCTGCACCAA..... 1 22
.....CTGCATCTGCACCTGCACCAA..... 1 20
.....TGCATCTGCACCTGCACCAA..... 1 19

```

```

>ppt-miR1030f_MIMAT0005128_Physcomitrella_patens_miR1030f
CAGTGATTTACACTTGTTCATTGGCACTACCTCTACATACTCTCAATGCCACGTATCTGCATCTGCACCTGCACCAAAGTTTGAATTTACCGCTCGTGTAGTCTGTTGTTGGAAGTGGGATGAGTGG
*****TCTGCATCTGCACCTGCACCAA***** ppt-miR1030f 21
.....TCTGCATCTGCACCTGCACCAA..... 31 21
.....TCTGCATCTGCACCTGCACCAA..... 1 23
.....TCTGCATCTGCACCTGCACC..... 1 20
.....TCTGCATCTGCACCTGCACC..... 1 19
.....TCTGCATCTGCACCTGCACCAA..... 1 22
.....CTGCATCTGCACCTGCACCAA..... 1 20
.....TGCATCTGCACCTGCACCAA..... 1 19

```

```

>ppt-miR1030g_MIMAT0005129_Physcomitrella_patens_miR1030g
CGTGAATTTACACTTGTCCATTTGCCCTACCTCGATTACTGCTCAATGCCACGTATCTGCATCTGCACCTGCACCAAAGTTTGAATTTGAAAGTCTAATGTAATGATGACACTTTTTGTACCCAAAGTGGG
*****TCTGCATCTGCACCTGCACCAA***** ppt-miR1030g 21
.....TCTGCATCTGCACCTGCACCAA..... 31 21
.....TCTGCATCTGCACCTGCACCAA..... 1 23
.....TCTGCATCTGCACCTGCACC..... 1 20
.....TCTGCATCTGCACCTGCACC..... 1 19
.....TCTGCATCTGCACCTGCACCAA..... 1 22
.....CTGCATCTGCACCTGCACCAA..... 1 20
.....TGCATCTGCACCTGCACCAA..... 1 19

```

```

>ppt-miR1031a_MIMAT0005133_Physcomitrella_patens_miR1031a
TGATCCAGCTACACTGAAGACACTGATAGACCTGCGAAATTTCTGGATCATAAATTTGCTCAATGCTCTGGAGCTTCTGTGTACCACGTTGGAGAGGTTGATTTGGACTCCCTGATAGGGCTTAGGCATCTTC
*****TCAATGCTCTGGAGCTTCT***** ppt-miR1031a 21
.....TCAATGCTCTGGAGCTTCT..... 438 21
.....TCAATGCTCTGGAGCTTCTGTG..... 1 24
.....TCAATGCTCTGGAGCTTCT..... 4 19
.....TCAATGCTCTGGAGCTTCTG..... 2 22
.....TCAATGCTCTGGAGCTTCT..... 5 20
.....CAATGCTCTGGAGCTTCT..... 4 20
.....AATGCTCTGGAGCTTCT..... 8 19
.....ATGCTCTGGAGCTTCTGT..... 1 20

```

```

>ppt-miR1031b_MIMAT0005134_Physcomitrella_patens_miR1031b
CAATGAACGGCCATTGATTCCTGATCGGACGGCGGAAGTTCTGGATCACAATTTGCTCAATGCTCTGGAGCTTCTGTGCCGTTGTTGGGAGTGGGTTGTCCCTGGACAGGTGCGAGAACCTGACGG
*****TCAATGCTCTGGAGCTTCT***** ppt-miR1031b 21
.....TCAATGCTCTGGAGCTTCT..... 438 21
.....TCAATGCTCTGGAGCTTCTGTG..... 1 24
.....TCAATGCTCTGGAGCTTCT..... 4 19
.....TCAATGCTCTGGAGCTTCTG..... 2 22
.....TCAATGCTCTGGAGCTTCT..... 5 20
.....CAATGCTCTGGAGCTTCT..... 4 20
.....AATGCTCTGGAGCTTCT..... 8 19
.....ATGCTCTGGAGCTTCTGT..... 1 20

```

```

>ppt-miR1033a_MIMAT0005136_Physcomitrella_patens_miR1033a
TACAATCCGGCGGTCATTGGGAATGTCATCACAACTGGCAACATTCAGGTTATGTTGACGGGCTGTGATGGGCCTCTCAGCTCTCATGTACAAAAACGCAGACATCTCACTCCGTACCACACAGTCTGAA
*****TGACGGGCTGTGATGGGCCT***** ppt-miR1033a 21
.....TGGCATTGGGAATGTCATC..... 1 20
.....ATGTCCATCACAACTGGCAAC..... 4 22
.....ATGTCCATCACAACTGGCA..... 2 20
.....ATGTCCATCACAACTGGCAA..... 2 21
.....GTTGACGGGCTGTGATGGGCCT..... 1 23
.....TTGACGGGCTGTGATGGGCCT..... 1 22
.....TGACGGGCTGTGATGGGCCT..... 148 21
.....TGACGGGCTGTGATGGGCCTCT..... 4 23
.....TGACGGGCTGTGATGGGCCTC..... 62 22
.....GACGGGCTGTGATGGGCCT..... 36 20
.....GACGGGCTGTGATGGGCCTC..... 35 21
.....GACGGGCTGTGATGGGCCTCT..... 1 22
.....ACGGGCTGTGATGGGCCTC..... 8 20
.....ACGGGCTGTGATGGGCCT..... 1 19
.....ATGGGCCTCTCAGCTCTCA..... 1 21

```

```

>ppt-miR1033b_MIMAT0005137_Physcomitrella_patens_miR1033b
GATGGAGATGATGGGATGTTGGGATGCTCAACACGATCTGTCAACATTTAGAGTATATTGACGGGCTGTGATGGGCCTCTCAATGCCACTTATGTTTGTGACGCTGACCCAGCTGTGAAATGATGACGATGGA
*****TGACGGGCTGTGATGGGCCT***** ppt-miR1033b 21
.....TGGGATGTTGGGATGCTCAAC..... 1 22
.....ATGCTCAACACGATCTGTCAACA..... 9 23
.....ATGCTCAACACGATCTGTCA..... 1 20
.....ATGCTCAACACGATCTGTCAAC..... 9 22
.....ATGCTCAACACGATCTGTCA..... 3 21
.....TGCTCAACACGATCTGTCAAC..... 21 21
.....TGCTCAACACGATCTGTCA..... 1 19
.....TGCTCAACACGATCTGTCA..... 7 20
.....TGCTCAACACGATCTGTCAACAT..... 4 23
.....TGCTCAACACGATCTGTCAACA..... 2 22
.....TGCTCAACACGATCTGTCAACATT..... 1 24
.....GCTCAACACGATCTGTCAAC..... 1 20
.....GCTCAACACGATCTGTCAACATT..... 1 23
.....ATTGACGGGCTGTGATGGGCCT..... 4 23
.....TTGACGGGCTGTGATGGGCCT..... 1 22
.....TGACGGGCTGTGATGGGCCT..... 148 21
.....TGACGGGCTGTGATGGGCCTCT..... 4 23
.....TGACGGGCTGTGATGGGCCTC..... 62 22
.....GACGGGCTGTGATGGGCCT..... 36 20
.....GACGGGCTGTGATGGGCCTC..... 35 21
.....GACGGGCTGTGATGGGCCTCT..... 1 22
.....ACGGGCTGTGATGGGCCT..... 8 20

```

.....ACGGGCTGTATGGGCACT.....	1	19
<p>>ppt-miR1033c_MIMAT0005138_Physcomitrella_patens_miR1033c</p>		
GATGGAAATGATGGGATGTTGGGATGCCCAACACGATCTGTCAACATTCTATGTTATATTGACGGGCTGTATGGGCACTCTCAATGTCACCTTCATGATAATAAAGCTTTTATGTGACATTGCAGCAGCAGATGA	ppt-miR1033c	21
*****TGACGGGCTGTATGGGCACT*****		
.....TGCCCAACACGATCTGTCAAC.....	2	21
.....ATTGACGGGCTGTATGGGCACT.....	4	23
.....TTGACGGGCTGTATGGGCACT.....	1	22
.....TGACGGGCTGTATGGGCACT.....	148	21
.....TGACGGGCTGTATGGGCACTCT.....	4	23
.....TGACGGGCTGTATGGGCACTC.....	62	22
.....GACGGGCTGTATGGGCACT.....	36	20
.....GACGGGCTGTATGGGCACTC.....	35	21
.....GACGGGCTGTATGGGCACTCT.....	1	22
.....ACGGGCTGTATGGGCACTC.....	8	20
.....ACGGGCTGTATGGGCACT.....	1	19
<p>>ppt-miR1033d_MIMAT0005139_Physcomitrella_patens_miR1033d</p>		
ACAAGGCTGGCAGTGCATTGGGAATGTCACGACGATCTGTCAACATTCAGGTTATGTTGACGGGCTGTATGGGCACTCTCACTGCTCATGCTGATGATTCTGGGTGCTTACGTTGTGGTCTACTCCGAGA	ppt-miR1033d	21
*****TGACGGGCTGTATGGGCACT*****		
.....ATGTCATGACGATCTGTCAAC.....	11	22
.....ATGTCATGACGATCTGTCAA.....	25	21
.....GTTGACGGGCTGTATGGGCACT.....	1	23
.....TTGACGGGCTGTATGGGCACT.....	1	22
.....TGACGGGCTGTATGGGCACT.....	148	21
.....TGACGGGCTGTATGGGCACTCT.....	4	23
.....TGACGGGCTGTATGGGCACTC.....	62	22
.....GACGGGCTGTATGGGCACT.....	36	20
.....GACGGGCTGTATGGGCACTC.....	35	21
.....GACGGGCTGTATGGGCACTCT.....	1	22
.....ACGGGCTGTATGGGCACTC.....	8	20
.....ACGGGCTGTATGGGCACT.....	1	19
<p>>ppt-miR1033e_MIMAT0005140_Physcomitrella_patens_miR1033e</p>		
TAAACATTCGGCAGGGGTTGGGAATGTCACGACAACTGTCAACATTCAGGTTATGTTGACGGGCTGTATGGGCACTCTCAGGCTCCATGCCAACTGCACATCAGCTTCAAGAAACACACACTCCGGAGAA	ppt-miR1033e	21
*****TGACGGGCTGTATGGGCACT*****		
.....GTTGACGGGCTGTATGGGCACT.....	1	23
.....TTGACGGGCTGTATGGGCACT.....	1	22
.....TGACGGGCTGTATGGGCACT.....	148	21
.....TGACGGGCTGTATGGGCACTCT.....	4	23
.....TGACGGGCTGTATGGGCACTC.....	62	22
.....GACGGGCTGTATGGGCACT.....	36	20
.....GACGGGCTGTATGGGCACTC.....	35	21
.....GACGGGCTGTATGGGCACTCT.....	1	22
.....ACGGGCTGTATGGGCACTC.....	8	20
.....ACGGGCTGTATGGGCACT.....	1	19
<p>>ppt-miR1039-5p_MIMAT0005148_Physcomitrella_patens_miR1039-5p</p>		
AGTAACCTGCTCCGCGCAGCTGCTCAGCAGGACTTATTGTGTACGCCACATAGGGTCTTTGGGCTTTCTCTCTGAAATGTTAAGAGCTTGAGCGCTAAATTTTCAGGGGAGACGGGCTCAAGGATCTTGAAG	ppt-miR1039-5p	21
*****TCTTTGGGCTTTCTCTCTG*****		
.....TTAGGGCTTTGGGCTTTCT.....	1	21
.....TAGGGCTTTGGGCTTTCTC.....	3	21
.....TAGGGCTTTGGGCTTTCT.....	1	20
.....TCTTTGGGCTTTCTCTCTGAA.....	2	23
.....TCTTTGGGCTTTCTCTCTGAAA.....	3	24
.....TCTTTGGGCTTTCTCTCTC.....	1	20
.....TCTTTGGGCTTTCTCTCTCG.....	19	21
.....TCTTTGGGCTTTCTCTCTGA.....	6	22
.....CTTTGGGCTTTCTCTCTCG.....	1	20
.....AGGGGAGACGGGCTCAAGGATC.....	1	22
.....GGGGAGACGGGCTCAAGGATC.....	30	21
.....GGGGAGACGGGCTCAAGGATCT.....	1	22
.....GGGGAGACGGGCTCAAGGAT.....	2	20
.....GGGGAGACGGGCTCAAGGATC.....	1	20
.....AGACGGGCTCAAGGATCTTGA.....	1	21
<p>>ppt-miR1039-3p_MIMAT0005149_Physcomitrella_patens_miR1039-3p</p>		
TTAGGGCTTTGGGCTTTCTCTCTGAAATGTTAAGAGCTTGAGCGCTTAAATTTTCAGGGGAGACGGGCTCAAGGATCTTGAAGTGGTGCCTGGGATGATAATACAGCGCTACATTTACAATATTCAACTTCACTC	ppt-miR1039-3p	21
*****GGGGAGACGGGCTCAAGGATC*****		
.....TTAGGGCTTTGGGCTTTCT.....	1	21
.....TAGGGCTTTGGGCTTTCTC.....	3	21
.....TAGGGCTTTGGGCTTTCT.....	1	20
.....TCTTTGGGCTTTCTCTCTGAA.....	2	23
.....TCTTTGGGCTTTCTCTCTGAAA.....	3	24
.....TCTTTGGGCTTTCTCTCTC.....	1	20
.....TCTTTGGGCTTTCTCTCTCG.....	19	21
.....TCTTTGGGCTTTCTCTCTGA.....	6	22
.....CTTTGGGCTTTCTCTCTCG.....	1	20
.....AGGGGAGACGGGCTCAAGGATC.....	1	22
.....GGGGAGACGGGCTCAAGGATC.....	30	21
.....GGGGAGACGGGCTCAAGGATCT.....	1	22
.....GGGGAGACGGGCTCAAGGAT.....	2	20
.....GGGGAGACGGGCTCAAGGATC.....	1	20
.....AGACGGGCTCAAGGATCTTGA.....	1	21
<p>>ppt-miR1043-5p_MIMAT0005154_Physcomitrella_patens_miR1043-5p</p>		
AGTACGCTAGTGGATGCTTCAACGTGAGAAGATTTAAGAGCTTGAGCGCTTAAATTTTCAGGGGAGACGGGCTCAAGGATCTTGAAGTGGTGCCTGGGATGATAATACAGCGCTACATTTACAATATTCAACTTCACTC	ppt-miR1043-5p	20
*****CTTCAACTTCATCGCTGCA*****		
.....CGGTTGGAGGCTTCAACTTC.....	2	21
.....CGGTTGGAGGCTTCAACTTCA.....	1	22
.....CGGTTGGAGGCTTCAACTTCATG.....	1	24
.....GAGGCCTTCAACTTCATCGG.....	2	20
.....GAGGCCTTCAACTTCATCG.....	1	19
.....GAGGCCTTCAACTTCATCGCT.....	1	21
.....AGGCCTTCAACTTCATCGCTGCA.....	1	23
.....CCTTCAACTTCATCGCTGCAAA.....	1	22
.....CCTTCAACTTCATCGCTGCAA.....	15	21

```

.....CCTTCAACTTCATCGGTGCA..... 36 20
.....CTTCAACTTCATCGGTGCAAA..... 1 22
.....CTTCAACTTCATCGGTGCAAA..... 20 21
.....CTTCAACTTCATCGGTGCA..... 45 19
.....CTTCAACTTCATCGGTGCA..... 14 20
.....ACCTGAATGATTGGATGGATT..... 5 23
.....ACCTGAATGATTGGATGGATT..... 24 24
.....ACCTGAATGATTGGATGGAT..... 3 22
.....CCCTGAATGATTGGATGGAT..... 4 21
.....CCCTGAATGATTGGATGGATT..... 43 22
.....CCCTGAATGATTGGATGGATT..... 1 23
.....TTTTGCGCGTGAATTTGAAGGCT..... 1 24
.....TTTTGCGCGTGAATTTGAAGGCT..... 1 23
.....TTTTGCGCGTGAATTTGAAGGC..... 863 21
.....TTTTGCGCGTGAATTTGAAGG..... 52 20
.....TTTTGCGCGTGAATTTGAAGCT..... 8 22
.....TTTTGCGCGTGAATTTGAAG..... 61 19
.....TTGCGCGTGAATTTGAAGCT..... 1093 21
.....TTGCGCGTGAATTTGAAGC..... 28 20
.....TTGCGCGTGAATTTGAAGCTCCC..... 2 24
.....TTGCGCGTGAATTTGAAGG..... 24 19
.....TTGCGCGTGAATTTGAAGCTCC..... 4 23
.....TTGCGCGTGAATTTGAAGGCTC..... 12 22
.....TGCGCGTGAATTTGAAGGCT..... 14 20
.....TGCGCGTGAATTTGAAGGC..... 1 19
.....TGCGCGTGAATTTGAAGCTCC..... 2 22
.....GCGCGTGAATTTGAAGCT..... 3 19
.....CGCGTGAATTTGAAGCTCC..... 1 20
.....CGTGAATTTGAAGGCTCCCA..... 1 21
.....CGTGAATTTGAAGGCTCCC..... 1 20
.....CGTGAATTTGAAGGCTCCCA..... 1 20
.....CGTGAATTTGAAGGCTCCCAT..... 2 21
.....CGTGAATTTGAAGGCTCCC..... 1 19
.....AATTTGAAGGCTCCCATTCGTT..... 1 22

```

```

>ppt-miR1043-3p_MIMAT0005155_Physcomitrella_patens_miR1043-3p
GGAAACGGTTGGAGGCTTCAACTTCATCGGTGCAAACTGAAATGATTGGATGGATTTTTCGCGTGAATTTGAAGGCTCCCATCTGCTAGCATGAAGAATAAGAGACCAGCAACACTCAAAAGGATACCAAGTT
*****TTGCGCGTGAATTTGAAGGCT*****
.....CGTTGGAGGCTTCAACTTC..... ppt-miR1043-3p 21
.....CGTTGGAGGCTTCAACTTCA..... 2 21
.....CGTTGGAGGCTTCAACTTCATG..... 1 22
.....GAGGCTTCAACTTCATGCG..... 1 24
.....GAGGCTTCAACTTCATGC..... 2 20
.....GAGGCTTCAACTTCATCG..... 1 19
.....AGGCTTCAACTTCATCGGTGCA..... 1 21
.....CCTTCAACTTCATCGGTGCAAA..... 1 23
.....CCTTCAACTTCATCGGTGCA..... 1 22
.....CCTTCAACTTCATCGGTGCA..... 15 21
.....CCTTCAACTTCATCGGTGCA..... 36 20
.....CTTCAACTTCATCGGTGCAAA..... 1 22
.....CTTCAACTTCATCGGTGCAAA..... 20 21
.....CTTCAACTTCATCGGTGCA..... 45 19
.....CTTCAACTTCATCGGTGCA..... 14 20
.....ACCTGAATGATTGGATGGATT..... 5 23
.....ACCTGAATGATTGGATGGATT..... 24 24
.....ACCTGAATGATTGGATGGAT..... 3 22
.....CCCTGAATGATTGGATGGAT..... 4 21
.....CCCTGAATGATTGGATGGATT..... 43 22
.....CCCTGAATGATTGGATGGATT..... 1 23
.....TTTTGCGCGTGAATTTGAAGGCT..... 1 24
.....TTTTGCGCGTGAATTTGAAGGCTC..... 1 23
.....TTTTGCGCGTGAATTTGAAGGC..... 863 21
.....TTTTGCGCGTGAATTTGAAGG..... 52 20
.....TTTTGCGCGTGAATTTGAAGGCT..... 8 22
.....TTTTGCGCGTGAATTTGAAG..... 61 19
.....TTGCGCGTGAATTTGAAGCT..... 1093 21
.....TTGCGCGTGAATTTGAAGC..... 28 20
.....TTGCGCGTGAATTTGAAGCTCCC..... 2 24
.....TTGCGCGTGAATTTGAAGG..... 24 19
.....TTGCGCGTGAATTTGAAGCTCC..... 4 23
.....TTGCGCGTGAATTTGAAGGCTC..... 12 22
.....TGCGCGTGAATTTGAAGGCT..... 14 20
.....TGCGCGTGAATTTGAAGGC..... 1 19
.....TGCGCGTGAATTTGAAGCTCC..... 2 22
.....GCGCGTGAATTTGAAGCT..... 3 19
.....CGCGTGAATTTGAAGCTCC..... 1 20
.....CGTGAATTTGAAGGCTCCCA..... 1 21
.....CGTGAATTTGAAGGCTCCC..... 1 20
.....CGTGAATTTGAAGGCTCCCA..... 1 20
.....CGTGAATTTGAAGGCTCCCAT..... 2 21
.....CGTGAATTTGAAGGCTCCC..... 1 19
.....AATTTGAAGGCTCCCATTCGTT..... 1 22

```

```

>ppt-miR1046-3p_MIMAT0005160_Physcomitrella_patens_miR1046-3p
TGGATTCATATTTTTCACGTCAGAAATCTCACAGTACAATTAAGTCATGAAATCTTGTGTGAAAAATGAAAAATCCACGCTGTAATTTGAAAGCGCTTGCCCTTTTGACAACTGCACAGTCTCATGTTGC
*****TGTGAAAAATGAAAAATC*****
TGGATTCATATTTTTCACG..... ppt-miR1046-3p 21
TGGATTCATATTTTTCAC..... 4 20
.....GTGTGAAAAATGAAAAAT..... 1 19
.....TGTGAAAAATGAAAAATCC..... 1 21
.....TGTGAAAAATGAAAAATCCA..... 1 22
.....TGAATAATGAAAAATCCAG..... 1 23
.....TGAATAATGAAAAATCCAGT..... 2 22
.....TGAATAATGAAAAATCCAGT..... 1 22

```

```

>ppt-miR1048-3p_MIMAT0005164_Physcomitrella_patens_miR1048-3p
AGTGTAGACACTATGTGCTGCAACTGCGCATCGGAGTTATATCCAACACATATGTTGCTACACTCATGTTAGACTTTAGACAAATAGCAGCTGTTACTGAGTTACAATTTGAGACTTTGAGACAAATAACA
*****TGCTACACTCATGTTCTAGA*****
.....ATATGTTGCTACACTCATGTT..... ppt-miR1048-3p 21
.....TGCTACACTCATGTTCTAGA..... 1 23
.....TGCTACACTCATGTTCTAGA..... 23 21

```



```

>ppt-miR1055_MIMAT0005173_Physcomitrella_patens_miR1055
ACACCCCTGAATCAGTACCATACATATTATTGATATCAAGGTGAACAAATTTGTGATTTAGGGGTGTTTTCCAGTGACTGCTGTAGATGCTTACATCTGTGTCTAGAGAGTGGGGTGGCGGGGGTTAGTGT
*****TTAGGGGTGTTTTCCAGTGACT*****
.....TTAGGGGTGTTTTCCAGTGA.....
.....TTAGGGGTGTTTTCCAGTGACT.....
.....TAGGGGTGTTTTCCAGTGACT.....
.....GGGGTGTTCAGTGACT.....
.....GTTTTCCAGTGACTGCTGTAGA.....
ppt-miR1055 22
1 20
8 22
1 21
1 19
1 23

>ppt-miR1063c_MIMAT0005184_Physcomitrella_patens_miR1063c
GGCTTCTCCCTGTAGTACAGAAATTTGTACCAAGATTTGCCGTGGCCACTTTCATCTGGAGTACTGATCTTACACCGTCCGTTTTCAAATCTGAATCACTGAAGCTGGGCTAGATTTAAGG
*****CATCTTGGAGTACTGATCTT*****
.....CATCTTGGAGTACTGATCTT.....
.....CATCTTGGAGTACTGATCTT.....
.....CATCTTGGAGTACTGATCTTCACA.....
.....CATCTTGGAGTACTGATCTTCA.....
.....ATCTTGGAGTACTGATCTTCA.....
.....ATCTTGGAGTACTGATCTTCACA.....
ppt-miR1063c 21
2 20
15 21
1 25
3 22
1 22
1 24

>ppt-miR1063e_MIMAT0005186_Physcomitrella_patens_miR1063e
CTCCGGAATGAACTGGTCCGACAGAAACCCGATGCTGCTTGGTCCACTCATCTGGAGTACTGATCTTACATCTGTAGCCTTCACTAAGTCTCAGGAGCACTAGTGTAGTTTCAGCGGAAT
*****CATCTTGGAGTACTGATCTT*****
.....CATCTTGGAGTACTGATCTT.....
.....CATCTTGGAGTACTGATCTT.....
.....CATCTTGGAGTACTGATCTTCACA.....
.....CATCTTGGAGTACTGATCTTCA.....
.....ATCTTGGAGTACTGATCTTCA.....
.....ATCTTGGAGTACTGATCTTCACA.....
ppt-miR1063e 21
2 20
15 21
1 25
3 22
1 22
1 24

>ppt-miR1063f_MIMAT0005187_Physcomitrella_patens_miR1063f
CGAGGTGTCACCTTGGGTGCGAAGCGTTGGGGTTTTAAGCTCTGCTCACTTACATCTGGAGTACTGATCTTACATCTGTAGATTTTCTATCTGTGTGATATCCCGGAATTTGAATCAGTACATA
*****CATCTTGGAGTACTGATCTT*****
.....TTACATCTTGGAGTACTGATCTT.....
.....CATCTTGGAGTACTGATCTT.....
.....CATCTTGGAGTACTGATCTT.....
.....CATCTTGGAGTACTGATCTTCACA.....
.....CATCTTGGAGTACTGATCTTCA.....
.....ATCTTGGAGTACTGATCTTCA.....
.....ATCTTGGAGTACTGATCTTCACA.....
ppt-miR1063f 21
1 22
2 20
15 21
1 25
3 22
1 22
1 24

>ppt-miR1063g_MIMAT0005188_Physcomitrella_patens_miR1063g
TCATCGCATCAAGTTACAGCACATCCAAGACTGCGGCTTGTGCTCACCTCATCTGGAGTACTGATCTTACATCTGGGTTTCACAATCTGCCTCAGGTTGTTAAAGTCCCGGAGTAAATTTGTGT
*****CATCTTGGAGTACTGATCTT*****
.....CATCTTGGAGTACTGATCTT.....
.....CATCTTGGAGTACTGATCTT.....
.....CATCTTGGAGTACTGATCTTCACA.....
.....CATCTTGGAGTACTGATCTTCA.....
.....ATCTTGGAGTACTGATCTTCA.....
.....ATCTTGGAGTACTGATCTTCACA.....
ppt-miR1063g 21
2 20
15 21
1 25
3 22
1 22
1 24

>ppt-miR1066_MIMAT0005193_Physcomitrella_patens_miR1066
GTCCGAGCATCGGTTACCACTGATCCCGCTCAGTAACTGTGCGAATTTATCGCACATGTTGAGAGCGGGTACAAGTGGCGGCTACTGCTACGATTGCAGTTTACACGCGTGACGGTTTGTGAGT
*****ACATGTTGAGAGCGGGTAC*****
.....GTTTACCACCTGATACCCCGCT.....
.....ACCCCGTCAAGTAACTGTGCGAA.....
.....GCACATGTTGAGAGCGGGTAC.....
.....ACATGTTGAGAGCGGGTAC.....
.....TGTTGAGAGCGGGTACAA.....
.....CGGGTACAAGTGGTGGCCG.....
.....CGGGTACAAGTGGTGGCCG.....
ppt-miR1066 21
1 21
1 24
1 23
3 21
1 20
1 20
3 21

>ppt-miR1070_MIMAT0005198_Physcomitrella_patens_miR1070
GGTCAACAGAGAGGTCAAGCGCATCAACTCTTGACCACTTTCTCTGTGCTCGTTGTATCGGTTCTAGTAAACTGCTGAAAATTTCAACAAGTTTACGAGCAACCGATCAACGAAGCAACCGACTGATTGT
*****TCGGTTTCTAGTAAACTGCT*****
.....TCGGTTTCTAGTAAACTGCT.....
.....GCAACCGATCAACGAAGCAA.....
ppt-miR1070 21
1 23
1 21

>ppt-miR1072_MIMAT0005201_Physcomitrella_patens_miR1072
AAAAATATCTTTAAATTTAAATCCCAATAAAAATGACAAACAATTTTATGATTGCATTTGTTATTTGAAGCTGAAAATAGGCCATCTTAAATAGAACTAATTTCTTTGAAATAAGATATCCGGTATGCC
*****TGCATTTGTTATTTGAAGCTGA*****
.....TGCATTTGTTATTTGAAGCTGA.....
.....GCATTTGTTATTTGAAGCTGA.....
.....AAATAGGCCATCTTAAATAGAAC.....
ppt-miR1072 24
1 24
1 23
1 26

>ppt-miR1073-5p_MIMAT0005202_Physcomitrella_patens_miR1073-5p
GGATGTAGTGTGAACTGAGCAGCATAGCAGACTGATTTAACGTGGAAGAATGAACACATGAATGATATTAACGTCCACGATGAAATCTAATGAGCAATGTTGCTGGGATTAACCTCAGTTTCAGACACAAGTTAAT
*****TGAATGATATTAACGTCCAC*****
.....CATGAATGATATTAACGTCCA.....
.....TGAATGATATTAACGTCCACGA.....
.....TGAATGATATTAACGTCCACGAT.....
.....TGAATGATATTAACGTCCAC.....
.....TGAATGATATTAACGTCCACG.....
.....TGAATGATATTAACGTCCA.....
.....GAATGATATTAACGTCCACG.....
.....GAATGATATTAACGTCCACGA.....
.....AATGATATTAACGTCCACG.....
.....ATGATATTAACGTCCACGA.....
ppt-miR1073-5p 21
1 21
267 22
2 23
24 20
836 21
9 19
9 20
7 21
6 19
2 19

>ppt-miR1074_MIMAT0005204_Physcomitrella_patens_miR1074
ATTTATCTGACTGGCCGCAATGTTCTTGAAGTTCAGGTTTTGCTGATTTGGTTCAGGTTGTAGTTGTGTGATGGTAAATTTCAATAACAAACATCAACCTCAACACAACGAACCACTGACCAACA
*****AGGTTGTTAGTTGTGTTGAT*****
.....TTGTTGTCAGGTTGTGTTGAT.....
.....TGGTCAAGGTTGTGTTGTTG.....
ppt-miR1074 21
5 21
2 21

```

```

.....GGTCAGGTTGTTAGTTGTTG..... 1 21
.....TCAGGTTGTTAGTTGTTGTTG..... 1 21
.....CAGGTTGTTAGTTGTTGTTGA..... 6 21
.....AGGTTGTTAGTTGTTGTTGATG..... 2 22
.....AGGTTGTTAGTTGTTGTTAGG..... 1 23
.....AGGTTGTTAGTTGTTGTTGA..... 36 20
.....AGGTTGTTAGTTGTTGTTGAT..... 49 21
.....TTGTTAGTTGTTGTTGATGGGT..... 1 21
.....ATCAACAACGAACAACCCCTGA..... 1 23
.....TCAACAACAACGAACAACCCCTGA..... 1 22
.....CAACAACAACGAACAACCCCTGA..... 7 21
.....CAACAACAACGAACAACCCCT..... 1 19
.....AACACAACGAACAACCCCTGA..... 5 20
.....AACACAACGAACAACCCCTGAC..... 13 21
.....ACAACAACGAACAACCCCTGACCA..... 1 21

```

```

>ppt-miR1078_MIMAT0005210_Physcomitrella_patens_miR1078
GTGTTGAAAAATTGCTTCTCAAACTTTACAACAACAAAACAAATACCTTGATGCTTTTGGATGATTCAATTGTGATAAAAAGTGTATACAATTGAATTCTAAATATCTCAATGTTTATTACAACT
*****TTTGGATGATTCAATTGTGA***** ppt-miR1078 21
.....TTTGGATGATTCAATTGTGA..... 21 20
.....TTTGGATGATTCAATTGTGATAA..... 5 24
.....TTTGGATGATTCAATTGTGAT..... 141 21
.....TTGGATGATTCAATTGTGAT..... 1 23
.....TGGATGATTCAATTGTGATAA..... 1 22
.....TGGATGATTCAATTGTGATAA..... 1 21
.....TATCACAATTGAATTATCTAAATA..... 1 24

```

```

>ppt-miR2084_MIMAT0010018_Physcomitrella_patens_miR2084
CTATACCAACTTGAGAAATTAAGTAGCAGTTACAAGTATCTTGAATTCGTGGAAGCGCCTGCATTGTTGGATTGGACTACAACGGAGGATAGCCCAATCCATCGAAGCAGGCGCTTCAACGACTTTCAGATTT
*****CCTGCATTGTTGGATTGGA***** ppt-miR2084 21
.....GCCCTGCATTGTTGGATTGT..... 1 21
.....GCCTGCATTGTTGGATTGGACT..... 1 24
.....GCCTGCATTGTTGGATTGT..... 1 19
.....CCTGCATTGTTGGATTGGACT..... 5 23
.....CCTGCATTGTTGGATTGGACT..... 3 22
.....CCTGCATTGTTGGATTGGGA..... 13 21
.....CTGCATTGTTGGATTGGACT..... 1 22
.....TGCATTGTTGGATTGGACT..... 1 21
.....AATCCATCGAAGCAGGCGCTT..... 1 21

```

```

>ppt-miR2082_MIMAT0010021_Physcomitrella_patens_miR2082
GCTTGAGTAGTGAGGAAGCAGGCTTGGCTGACTCGTCCACATCTGCCGCTCCAGATTGTGTTCCGCTTCTTCTTGTGATGATGCTCCACAGATCAAGCATGATAGAAGAAGGCGCTTACGCAATCTG
*****TGTGTTCCGCTTCTTCTT***** ppt-miR2082 21
.....TGTGTTCCGCTTCTTCTT..... 33 21
.....GTGTTCCGCTTCTTCTT..... 1 21
.....AGAAGAAGGCGCTTACGCAA..... 1 23
.....AGAAGAAGGCGCTTACGCAAT..... 38 21
.....AGAAGAAGGCGCTTACGCAA..... 2 19
.....AGAAGAAGGCGCTTACGCAA..... 2 20
.....AGAAGAAGGCGCTTACGCAATCT..... 1 23

```

Table S1. Total small RNA reads from the new MIR sites

miRNAs	18–22nt	23–26 nt	% of 23–26nt reads
miR2883	65	5	7.14%
miR2328	40	1	2.44%
miR2831	15	9	37.50%
miR2812	21	43	67.19%
miR2010	17	2	10.53%
miR2011	1	6	85.71%
miR2012	173	40	18.78%
miR2012_star	21	9	30.00%
miR2014	36	60	62.50%
miR2018	40	0	0.00%
miR2022	32	0	0.00%

Table S2. The 23-26 reads from new MIRs and known MIRs that found in AGO-immunoprecipitated small RNA libraries

	AG01	AG02	AG04	AG05	AG07
New miRNA candidates					
cand2883			1		
cand2831-3p			5		
cand2812			2		7
cand2010			1		
cand2012			4		
cand2012_star			2		
cand2014			50		
Total %			100%		14%
Known miRNAs					
ath-miR156a			36		
ath-miR156b			36		
ath-miR156c			36		
ath-miR157c	240		240		
ath-miR158a			9		
ath-miR161.2	219		276	90	
ath-miR161.1	219		276	90	
ath-miR163	717	286	1249	376	400
ath-miR164a	1		1		
ath-miR164b	10		10		
ath-miR165a			4		4
ath-miR166a			36	9	25
ath-miR166b			25	1	25
ath-miR166c			1		1
ath-miR166d			25		25
ath-miR166e			3	1	1
ath-miR166f			1		1
ath-miR166g			1		1
ath-miR167a	6		4		
ath-miR167b	313		303		
ath-miR168a	498		514	90	208
ath-miR168b	44		64	8	20
ath-miR169a	1				3
ath-miR172a	1		2		1
ath-miR172b	1		4		1
ath-miR173	25		21		
ath-miR167d	34		17		
ath-miR169h	3				

Table S2. The 23-26 reads from new MIRs and known MIRs that found in AGO-immunoprecipitated small RNA libraries

ath-miR169i	4				6
ath-miR169j	2				4
ath-miR169k	3				
ath-miR169l	2				4
ath-miR169m	3				1
ath-miR169n	2				4
ath-miR171b			1		
ath-miR171c			1		
ath-miR390a			12		
ath-miR390b			12		
ath-miR391	60		932		
ath-miR396a			8		4
ath-miR172e			2		
ath-miR447a	3				
ath-miR447b	3				
ath-miR775	937		937	1408	466
ath-miR829.1			8		8
ath-miR840			1		
ath-miR843			1		
ath-miR848	19				
ath-miR850			1		
ath-miR852			9		
ath-miR863-3p	2		21		
Total %	55%	2%	78%	18%	43%

Table S3: Small RNA reads from canonical MIRs in our small RNA dataset

miRNAs	20-22nt	23-26 nt	% of 23-26nt reads
ath-miR156a	34828	15	0.04%
ath-miR156b	34827	15	0.04%
ath-miR156c	34828	15	0.04%
ath-miR156d	67667	6	0.01%
ath-miR157a	153334	24	0.02%
ath-miR157b	153333	16	0.01%
ath-miR157c	154514	250	0.16%
ath-miR157d	13969	7	0.05%
ath-miR158a	101478	11	0.01%
ath-miR160a	6562	5	0.08%
ath-miR160c	5078	13	0.26%
ath-miR161.2	122023	196	0.16%
ath-miR161.1	122023	196	0.16%
ath-miR163	1204	294	19.63%
ath-miR164a	15292	1	0.01%
ath-miR164b	15318	10	0.07%
ath-miR165a	5180	4	0.08%
ath-miR166a	67237	39	0.06%
ath-miR166b	63656	27	0.04%
ath-miR166c	63659	1	0.00%
ath-miR166d	63660	25	0.04%
ath-miR166e	63731	8	0.01%
ath-miR166f	63729	1	0.00%
ath-miR166g	63734	1	0.00%
ath-miR167a	412062	4	0.00%
ath-miR167b	412308	305	0.07%
ath-miR168a	107511	147	0.14%
ath-miR168b	107455	27	0.03%
ath-miR169a	14156	10	0.07%
ath-miR172a	44326	2	0.00%
ath-miR172b	44319	3	0.01%
ath-miR173	5764	28	0.48%
ath-miR167d	8086	19	0.23%
ath-miR169c	986	3	0.30%
ath-miR169d	1948	1	0.05%
ath-miR169e	1732	1	0.06%
ath-miR169f	1412	8	0.56%
ath-miR169g	1297	2	0.15%
ath-miR169h	5222	3	0.06%
ath-miR169i	6312	11	0.17%
ath-miR169j	6300	7	0.11%

ath-miR169k	5227	3	0.06%
ath-miR169l	6289	7	0.11%
ath-miR169m	5385	6	0.11%
ath-miR169n	6306	8	0.13%
ath-miR171b	978	1	0.10%
ath-miR171c	1026	1	0.10%
ath-miR172d	949	5	0.52%
ath-miR390a	6090	13	0.21%
ath-miR390b	5978	14	0.23%
ath-miR391	38455	544	1.39%
ath-miR393a	467	2	0.43%
ath-miR393b	465	4	0.85%
ath-miR396a	4981	7	0.14%
ath-miR396b	418	1	0.24%
ath-miR400	3347	13	0.39%
ath-miR402	52	3	5.45%
ath-miR403	1569	12	0.76%
ath-miR406	1	4	80.00%
ath-miR407	1	3	75.00%
ath-miR408	368	4	1.08%
ath-miR172e	184	1	0.54%
ath-miR447a	158	5	3.07%
ath-miR447b	156	5	3.11%
ath-miR472	392	1	0.25%
ath-miR775	2439	478	16.39%
ath-miR777	105	5	4.55%
ath-miR829.1	0	15	100.00%
ath-miR840	26	1	3.70%
ath-miR843	1153	1	0.09%
ath-miR848	77	24	23.76%
ath-miR850	404	19	4.49%
ath-miR852	165	5	2.94%
ath-miR860	62	7	10.14%
ath-miR861-3p	8	4	33.33%
ath-miR863-5p	106	9	7.83%
ath-miR863-3p	1781	113	5.97%
ath-miR865-5p	21	4	16.00%
ath-miR866-5p	38	1	2.56%
ath-miR1888	70	1	1.41%
ath-miR2112-5p	100	1	0.99%

Table S4. The reads of small RNAs from known MIRs in Rice dataset GSM361264

miRNAs	20-22nt	23-26 nt	% of 23-26nt reads
osa-miR156d	518916	4	0.00%
osa-miR156f	517428	3	0.00%
osa-miR156g	165909	3	0.00%
osa-miR162a	571	1	0.17%
osa-miR166a	34834	1	0.00%
osa-miR166b	34799	1	0.00%
osa-miR166c	47980	2	0.00%
osa-miR166d	34834	1	0.00%
osa-miR167b	259464	1	0.00%
osa-miR169a	258	211	44.99%
osa-miR395i	8	1	11.11%
osa-miR397a	2685	4	0.15%
osa-miR397b	3274	1	0.03%
osa-miR159a.2	3834	1	0.03%
osa-miR164e	245	1	0.41%
osa-miR166k	2659	1	0.04%
osa-miR166l	2672	2	0.07%
osa-miR167d	724905	1622	0.22%
osa-miR167e	12332	3	0.02%
osa-miR167f	724883	790	0.11%
osa-miR167g	724944	24592	3.28%
osa-miR167h	724881	779	0.11%
osa-miR167i	12344	4	0.03%
osa-miR168a	668973	146	0.02%
osa-miR169h	38	4	9.52%
osa-miR169i	38	4	9.52%
osa-miR169j	38	4	9.52%
osa-miR169k	38	3	7.32%
osa-miR169l	38	3	7.32%
osa-miR169m	38	2	5.00%
osa-miR171d	210	1	0.47%
osa-miR171e	210	1	0.47%
osa-miR393b	260	4	1.52%
osa-miR167j	724900	1626	0.22%
osa-miR166m	1068	4	0.37%
osa-miR435	109	6	5.22%
osa-miR437	2	7	77.78%
osa-miR439a	7	65	90.28%
osa-miR439b	1	8	88.89%
osa-miR439c	7	62	89.86%
osa-miR439d	6	63	91.30%

osa-miR439e	7	65	90.28%
osa-miR439f	7	65	90.28%
osa-miR439g	7	65	90.28%
osa-miR439h	7	65	90.28%
osa-miR440	25	11	30.56%
osa-miR441a	3	3	50.00%
osa-miR441b	1	2	66.67%
osa-miR441c	4	3	42.86%
osa-miR442	13	74	85.06%
osa-miR445a	5	13	72.22%
osa-miR528	122921	38	0.03%
osa-miR530-5p	1347	9	0.66%
osa-miR530-3p	1184	209	15.00%
osa-miR535	28991	1	0.00%
osa-miR395p	9	2	18.18%
osa-miR395w	0	1	100.00%
osa-miR806a	120	435	78.38%
osa-miR806b	94	40	29.85%
osa-miR806c	94	414	81.50%
osa-miR806d	120	446	78.80%
osa-miR806e	89	276	75.62%
osa-miR806f	82	253	75.52%
osa-miR806g	119	433	78.44%
osa-miR806h	94	415	81.53%
osa-miR807c	1	1	50.00%
osa-miR808	128	1	0.78%
osa-miR809a	9	9	50.00%
osa-miR809b	9	9	50.00%
osa-miR809c	8	8	50.00%
osa-miR809d	10	18	64.29%
osa-miR809e	1	1	50.00%
osa-miR809f	1	1	50.00%
osa-miR809g	8	7	46.67%
osa-miR809h	1	1	50.00%
osa-miR811a	14	24	63.16%
osa-miR811b	14	24	63.16%
osa-miR812a	38	76	66.67%
osa-miR812b	31	42	57.53%
osa-miR812c	19	84	81.55%
osa-miR812d	28	36	56.25%
osa-miR812e	76	108	58.70%
osa-miR813	1	3	75.00%
osa-miR814a	0	1	100.00%

osa-miR814b	0	2	100.00%
osa-miR815a	36	196	84.48%
osa-miR815b	95	483	83.56%
osa-miR815c	165	1262	88.44%
osa-miR816	1	1	50.00%
osa-miR818a	0	15	100.00%
osa-miR818b	33	71	68.27%
osa-miR818c	1	16	94.12%
osa-miR818d	75	145	65.91%
osa-miR818e	8	40	83.33%
osa-miR819a	69	168	70.89%
osa-miR819b	19	112	85.50%
osa-miR819c	69	168	70.89%
osa-miR819d	69	168	70.89%
osa-miR819e	69	168	70.89%
osa-miR819f	69	167	70.76%
osa-miR819g	70	167	70.46%
osa-miR819h	69	167	70.76%
osa-miR819i	21	47	69.12%
osa-miR819j	30	60	66.67%
osa-miR819k	55	96	63.58%
osa-miR820a	50	3647	98.65%
osa-miR820b	50	3647	98.65%
osa-miR820c	50	3647	98.65%
osa-miR1425	1094	24	2.15%
osa-miR1427	72	14	16.28%
osa-miR1429-5p	0	1	100.00%
osa-miR810b.1	111	7	5.93%
osa-miR1436	9	1	10.00%
osa-miR1437	2	3	60.00%
osa-miR1441	13	17	56.67%
osa-miR1442	1	2	66.67%
osa-miR1846d-5p	13	1	7.14%
osa-miR1847.1	5	1	16.67%
osa-miR1849	23	10	30.30%
osa-miR1846a-5p	3	1	25.00%
osa-miR1846b-5p	3	1	25.00%
osa-miR1860-3p	1	2	66.67%
osa-miR1884a	22	4	15.38%
osa-miR1861d	0	1	100.00%
osa-miR1861h	0	1	100.00%
osa-miR1861i	0	1	100.00%
osa-miR1861j	0	1	100.00%

osa-miR18611	0	1	100.00%
osa-miR1862a	68	13	16.05%
osa-miR1862b	65	11	14.47%
osa-miR1862c	76	11	12.64%
osa-miR1863	39	496	92.71%
osa-miR1864	7	18	72.00%
osa-miR1865-5p	2	37	94.87%
osa-miR1867	14	129	90.21%
osa-miR1868	15	274	94.81%
osa-miR812f	2	34	94.44%
osa-miR1869	5	1	16.67%
osa-miR1870	117	2421	95.39%
osa-miR1871	0	11	100.00%
osa-miR1872	1	10	90.91%
osa-miR1873	6	24	80.00%
osa-miR1874-3p	0	2	100.00%
osa-miR1875	56	34	37.78%
osa-miR1862d	70	858	92.46%
osa-miR1876	1	80	98.77%
osa-miR1884b	3	18	85.71%
osa-miR1862e	71	729	91.13%
osa-miR1878	1	23	95.83%
osa-miR1879	32	26	44.83%
osa-miR1880	2	7	77.78%
osa-miR1881	2	16	88.89%
osa-miR812g	11	121	91.67%
osa-miR812h	16	153	90.53%
osa-miR812i	13	147	91.88%
osa-miR812j	11	153	93.29%
osa-miR1318	59600	252	0.42%
osa-miR1319	1	1	50.00%
osa-miR1320	718	8	1.10%
osa-miR1846e	280	40	12.50%
osa-miR2098-3p	0	1	100.00%
osa-miR2121a	16	47	74.60%
osa-miR2121b	16	43	72.88%
osa-miR2123a	82	253	75.52%
osa-miR2123b	54	184	77.31%
osa-miR2123c	118	302	71.90%
osa-miR2124a	1	2	66.67%
osa-miR2124b	1	4	80.00%
osa-miR2124c	1	2	66.67%
osa-miR2124d	1	2	66.67%

osa-miR2124e	1	2	66.67%
osa-miR2124f	1	5	83.33%
osa-miR2124g	1	2	66.67%
osa-miR2124i	1	2	66.67%
osa-miR2125	0	4	100.00%
osa-miR2124h	1	2	66.67%

Table S5. The reads of small RNAs from known MIRs in Moss Dataset GSM313212

miRNAs	20-22nt	23-26 nt	% of 23-26nt reads
ppt-miR390b	285	1	0.35%
ppt-miR319a	927	2	0.22%
ppt-miR319b	537	1	0.19%
ppt-miR319c	1679	4	0.24%
ppt-miR319d	1740	1	0.06%
ppt-miR533a	405	2	0.49%
ppt-miR534a	3125	94	2.92%
ppt-miR536a	41177	317	0.76%
ppt-miR537a	36	1	2.70%
ppt-miR537b	510	3	0.58%
ppt-miR538a	1054	17	1.59%
ppt-miR538b	1006	13	1.28%
ppt-miR538c	1005	13	1.28%
ppt-miR1215	950	3	0.31%
ppt-miR1217-5p	48	5	9.43%
ppt-miR1217-3p	964	6	0.62%
ppt-miR1218	989	2	0.20%
ppt-miR535d	1383	1	0.07%
ppt-miR1221-3p	122	4	3.17%
ppt-miR1222a	625	1	0.16%
ppt-miR477c	395	7	1.74%
ppt-miR477f	339	9	2.59%
ppt-miR477g-5p	339	9	2.59%
ppt-miR477g-3p	829	77	8.50%
ppt-miR894	157	1	0.63%
ppt-miR896	398	220	35.60%
ppt-miR897	4	8	66.67%
ppt-miR900-5p	136	3	2.16%
ppt-miR900-3p	91	12	11.65%
ppt-miR902b-5p	570	3	0.52%
ppt-miR536b	41176	334	0.80%
ppt-miR904a	9949	22	0.22%
ppt-miR904b	9947	22	0.22%
ppt-miR898b	7039	21	0.30%
ppt-miR898a	7482	7	0.09%
ppt-miR408b	18	2	10.00%
ppt-miR477d	615	9	1.44%
ppt-miR477e	413	1	0.24%
ppt-miR533c	402	10	2.43%

ppt-miR536d	41180	327	0.79%
ppt-miR536e	41180	326	0.79%
ppt-miR536f	107	1	0.93%
ppt-miR537c	510	3	0.58%
ppt-miR537d	32	1	3.03%
ppt-miR902c-5p	554	1	0.18%
ppt-miR902e-5p	565	2	0.35%
ppt-miR902g-5p	565	2	0.35%
ppt-miR902h-5p	312	4	1.27%
ppt-miR902h-3p	17	1	5.56%
ppt-miR1023a-5p	1730	2	0.12%
ppt-miR1023a-3p	4050	8	0.20%
ppt-miR1025	1250	6	0.48%
ppt-miR1026b	176	1	0.56%
ppt-miR1027a	126	3	2.33%
ppt-miR1027b	126	3	2.33%
ppt-miR1030a	34	1	2.86%
ppt-miR1030f	34	1	2.86%
ppt-miR1030g	34	1	2.86%
ppt-miR1031a	450	1	0.22%
ppt-miR1031b	450	1	0.22%
ppt-miR1033a	291	5	1.69%
ppt-miR1033b	291	8	2.68%
ppt-miR1033c	291	8	2.68%
ppt-miR1033d	291	5	1.69%
ppt-miR1033e	291	5	1.69%
ppt-miR1038-5p	120	1	0.83%
ppt-miR1039-5p	32	5	13.51%
ppt-miR1043-5p	93	2	2.11%
ppt-miR1043-3p	2079	8	0.38%
ppt-miR1046-3p	4	2	33.33%
ppt-miR1048-3p	23	1	4.17%
ppt-miR1055	10	1	9.09%
ppt-miR1063c	21	2	8.70%
ppt-miR1063e	21	2	8.70%
ppt-miR1063f	22	2	8.33%
ppt-miR1063g	21	2	8.70%
ppt-miR1066	8	1	11.11%
ppt-miR1070	0	1	100.00%
ppt-miR1072	0	2	100.00%
ppt-miR1073-5p	1144	2	0.17%
ppt-miR1074	103	1	0.96%
ppt-miR1078	164	6	3.53%

ppt-miR2084	19	6	24.00%
-------------	----	---	--------