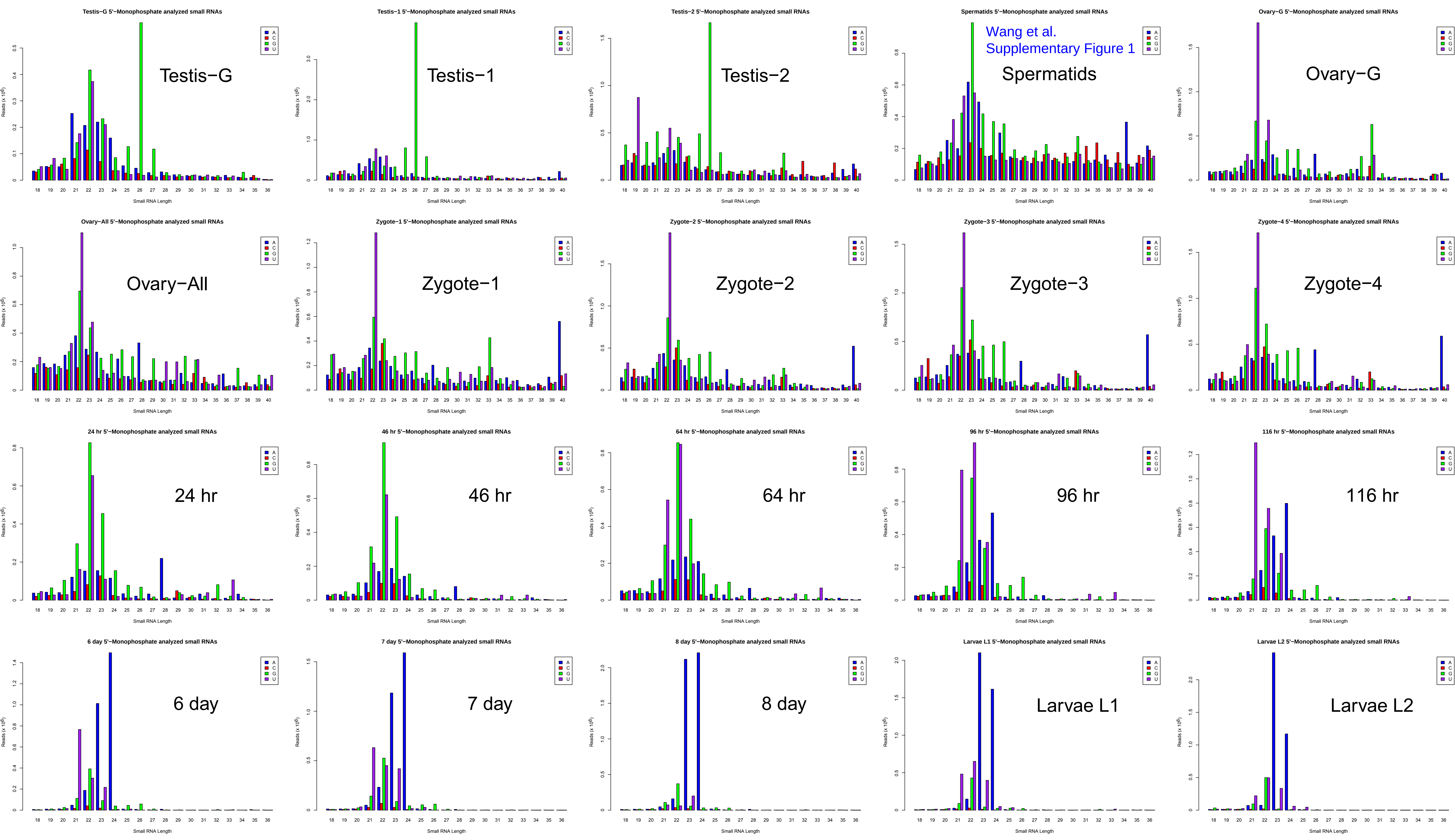
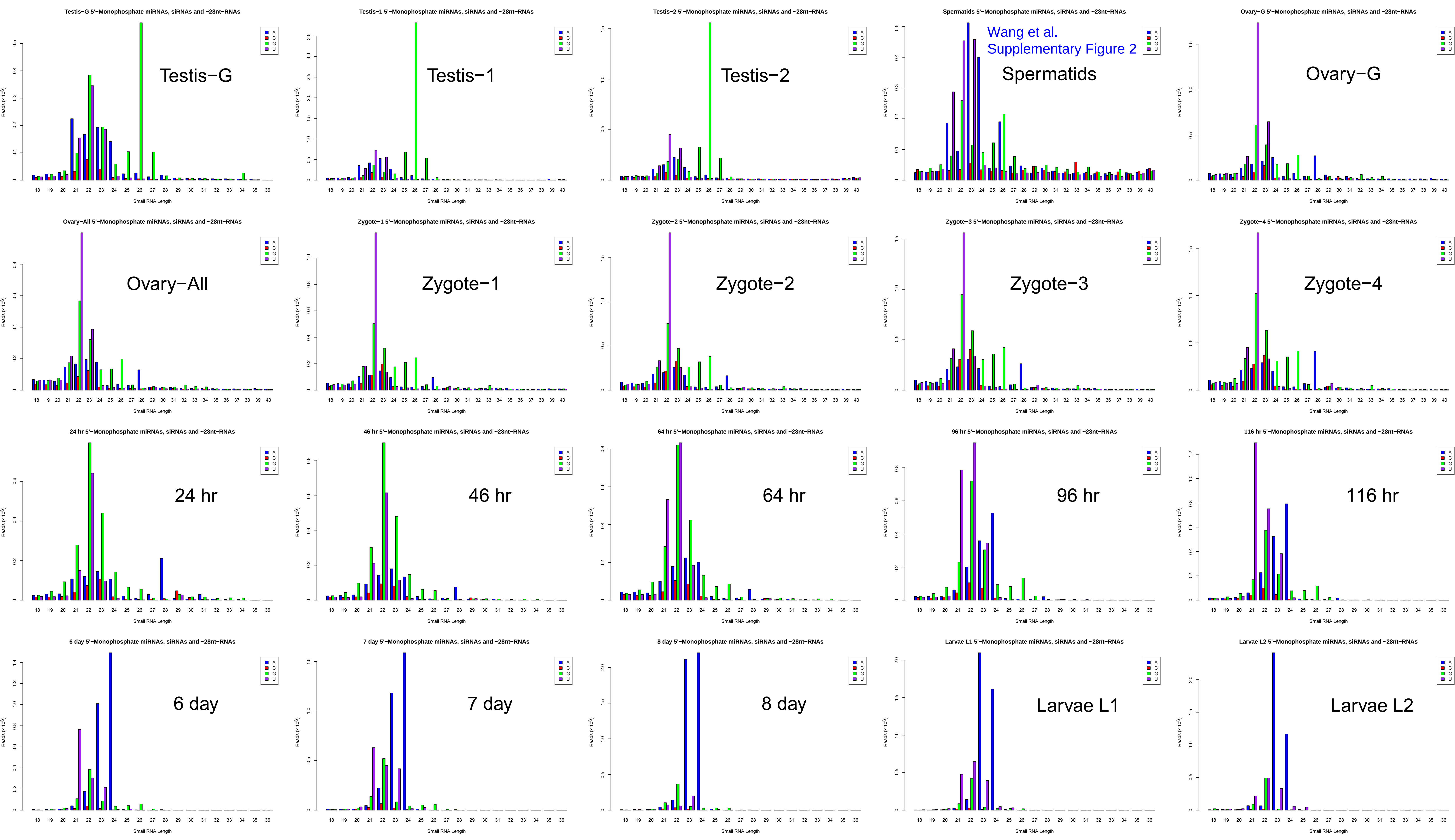
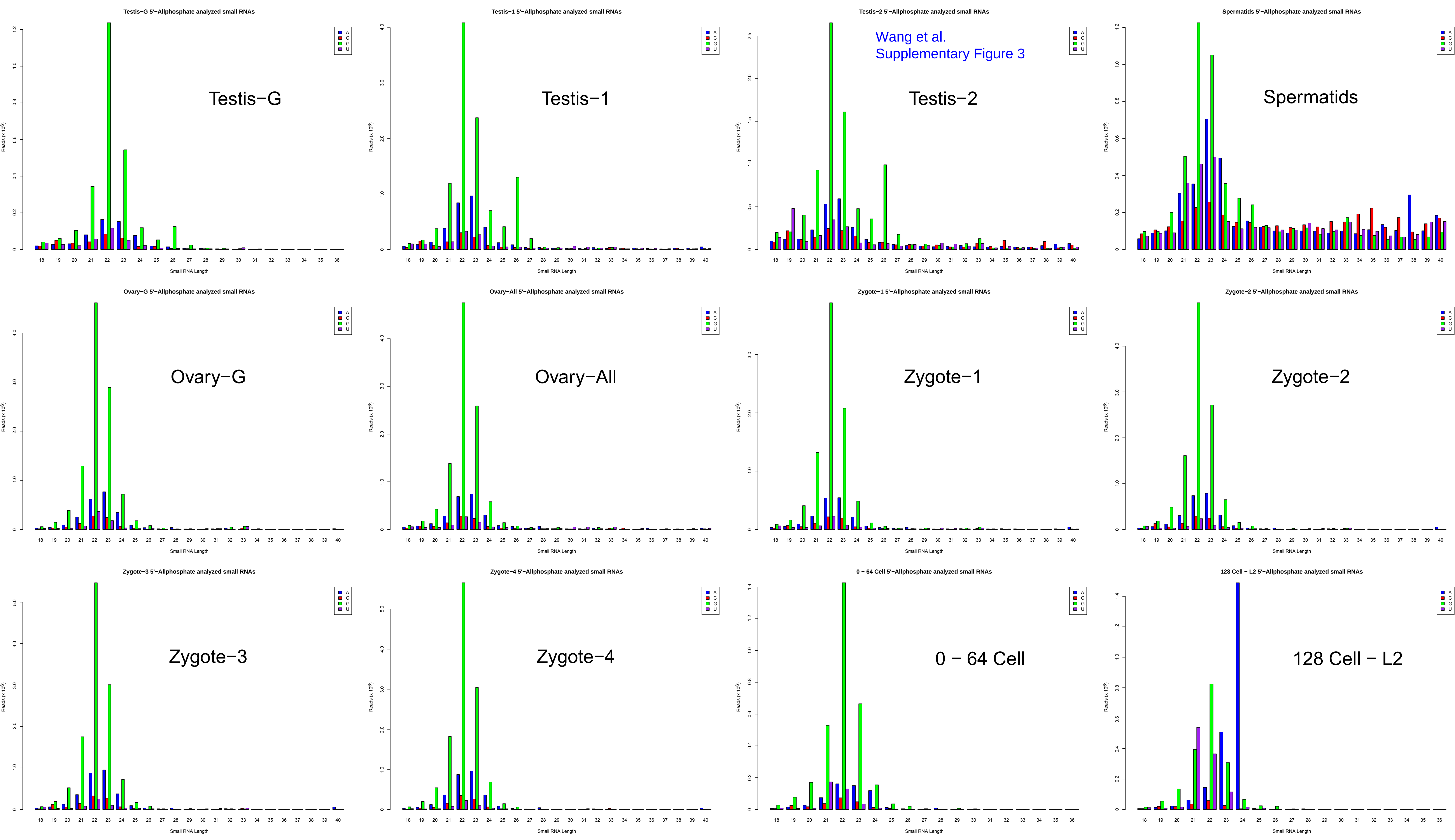
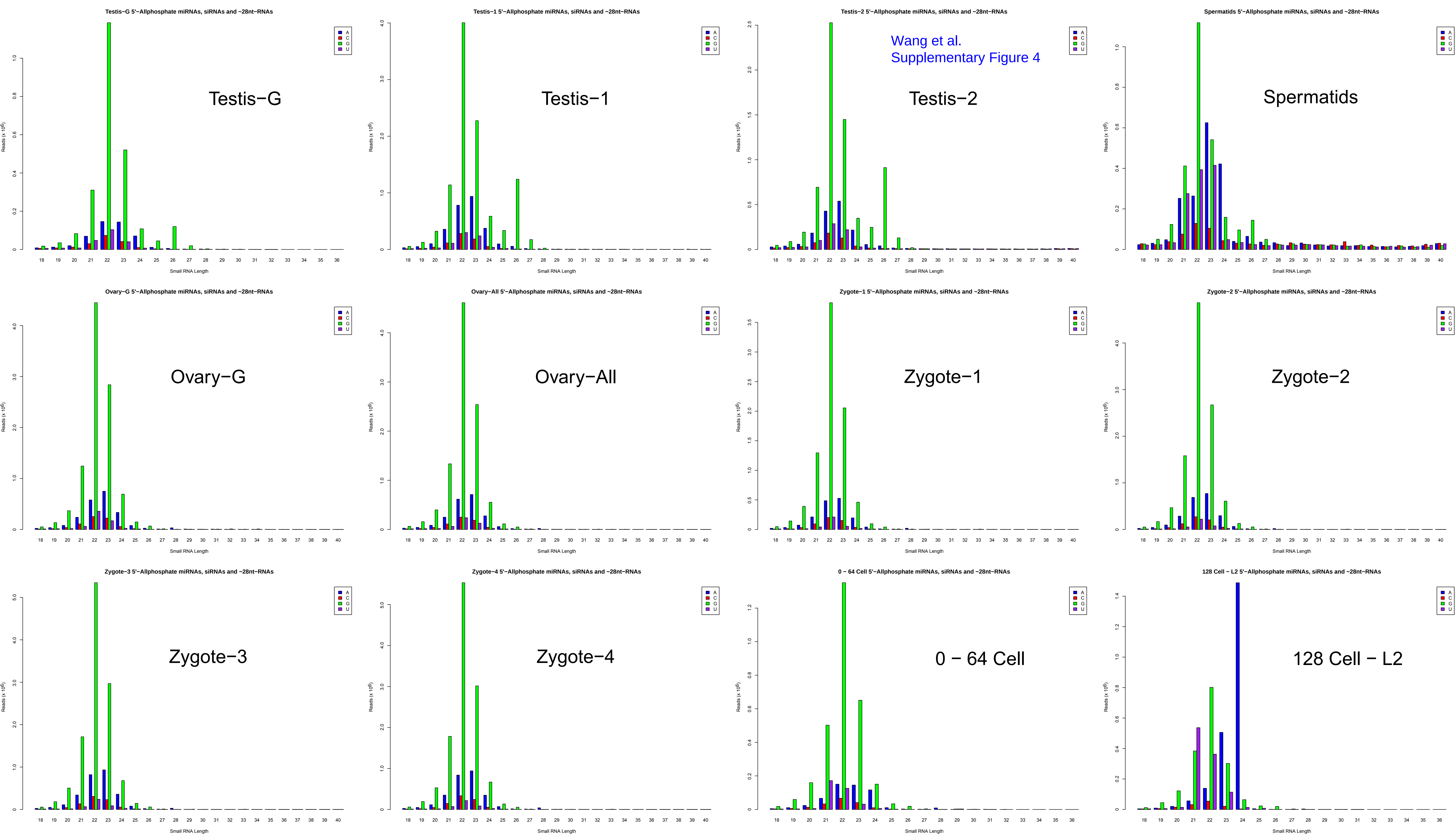










.....AGUGUGGUUAGCUGGUUG..... 18 157
Others
.....AACGGCUAUCACCACUGCCGUCC..... 23 104

#asu-miR-36a

CGUGUGUAGUGGAUGUACCCUCGGUUCGAUGUUUCUUACUAUCAUCACGGGUAUACAUAUCAAAUACCGUAGCUA

(((((...(((((((((...(((((((((...)))))))))...)))))))))...)))))).....

Total sRNA: 173670 shared 5' end with miRNA: 19549 shared 3' end with miRNA: 549

miRNA

.....UCACCGGGUAUACAUAUCAAA..... 22 141418

Shared 5' Terminus

.....UCACCGGGUAUACAUAUCA..... 18 58
.....UCACCGGGUAUACAUAUCA..... 19 81
.....UCACCGGGUAUACAUAUUAUC..... 20 550
.....UCACCGGGUAUACAUAUCA..... 21 15617
.....UCACCGGGUAUACAUAUCAAA..... 23 3238

Shared 3' Terminus

.....CGGGUAUACAUAUCAAA..... 18 96
.....ACCGGGUAUACAUAUCAAA..... 20 265
.....CACCGGGUAUACAUAUCAAA..... 21 52
.....AUCACCGGGUAUACAUAUCAAA..... 23 89

Subsequence

Others

.....AGUGGAUGUACCCUCGGUUCGA..... 22 103
.....AGUGGAUGUACCCUCGGUUCGAU..... 23 323
.....AGUGGAUGUACCCUCGGUUCGAUG..... 24 11061
.....AGUGGAUGUACCCUCGGUUCGAUGU..... 25 408

#asu-miR-36b

GUGGCCGUAUCGUGAGUUUGCGACGGUAGCUGUGUAUCGGUGUCACCGGGUGAACAUUCAUUUACGGCCCAUUG

(.(((((((((((((...(((((((((...)))))))))...)))))))))...)))))).....

Total sRNA: 24273 shared 5' end with miRNA: 1684 shared 3' end with miRNA: 76

miRNA

.....UCACCGGGUGAACAUUCAUUU..... 22 14919

Shared 5' Terminus

.....UCACCGGGUGAACAUUCA..... 18 42
.....UCACCGGGUGAACAUUCA..... 19 6
.....UCACCGGGUGAACAUUCAUU..... 20 170
.....UCACCGGGUGAACAUUCAUUA..... 21 1448
.....UCACCGGGUGAACAUUCAUUUUC..... 23 17

Shared 3' Terminus

.....CGGGUGAACAUUCAUUU..... 18 5
.....CCGGGUGAACAUUCAUUU..... 19 9
.....ACCGGGUGAACAUUCAUUU..... 20 29
.....CACCGGGUGAACAUUCAUUU..... 21 6
.....CUCACCGGGUGAACAUUCAUUU..... 23 27

Subsequence

.....ACCGGGUGAACAUUCAUUA..... 19 5

Others

.....CGUGAGUGUUUGCGACGGUUA..... 21 19
.....CGUGAGUGUUUGCGACGGUUA..... 22 51
.....CGUGAGUGUUUGCGACGGUUAAGC..... 23 6891
.....CGUGAGUGUUUGCGACGGUUAAGCG..... 24 5
.....CGUGAGUGUUUGCGACGGUUAAGCGUC..... 26 5
.....CGUGAGUGUUUGCGACGGUUAAGCGUCUGGUAUCGG..... 35 9
.....CGUGAGUGUUUGCGACGGUUAAGCGUCUGGUAUCGGU..... 36 20
.....CGUGAGUGUUUGCGACGGUUAAGCGUCUGGUAUCGGUG..... 37 46
.....CGUGAGUGUUUGCGACGGUUAAGCGUCUGGUAUCGGUGC..... 38 321
.....CGUGAGUGUUUGCGACGGUUAAGCGUCUGGUAUCGGUGCU..... 39 14
.....GUGAGUGUUUGCGACGGUUAAGC..... 22 21
.....CGGUUAGCGUCUGGUAUCGGU..... 21 12
.....CGGUUAGCGUCUGGUAUCGGUG..... 22 12
.....GGUUAGCGUCUGGUAUCGGUGC..... 22 5
.....CUCACCGGGUGAACAUUCAUUA..... 22 14

#asu-miR-36c

ACGUGACGGGGAUUCUACUUUUGGUGAAGCGAGCUCAGAUACUUCACCGGGCUCGAAUCCUGUCCUGUCAUGAUUC

(((((.....((((((((.....))))))))))..)))))).....

Total sRNA: 948146 shared 5' end with miRNA: 72559 shared 3' end with miRNA: 132796

miRNA

.....UCACCGGGCUCGAAUCCUGUC.....	22	641611
Shared 5' Terminus		
.....UCACCGGGCUCGAAUCC.....	18	130
.....UCACCGGGCUCGAAUCCU.....	19	402
.....UCACCGGGCUCGAAUCCUG.....	20	172
.....UCACCGGGCUCGAAUCCUGU.....	21	70135
.....UCACCGGGCUCGAAUCCUGUCC.....	23	1712
Shared 3' Terminus		
.....CGGGCUCGAAUCCUGUC.....	18	133
.....ACCGGGCUCGAAUCCUGUC.....	20	2500
.....CACCGGGCUCGAAUCCUGUC.....	21	5879
.....UUCACCGGGCUCGAAUCCUGUC.....	23	124075
.....CUUCACCGGGCUCGAAUCCUGUC.....	24	121
Subsequence		
.....CACCGGGCUCGAAUCCUGU.....	20	488
Others		
.....ACGGGGAUUCUACUUUUGGUGA.....	22	118
.....ACGGGGAUUCUACUUUUGGUGAA.....	23	181
.....ACGGGGAUUCUACUUUUGGUGAAG.....	24	139
.....CGGGGAUUCUACUUUUGGU.....	19	126
.....CGGGGAUUCUACUUUUGGUG.....	20	162
.....CGGGGAUUCUACUUUUGGUGA.....	21	286
.....CGGGGAUUCUACUUUUGGUGAA.....	22	1788
.....CGGGGAUUCUACUUUUGGUGAAG.....	23	51389
.....CGGGGAUUCUACUUUUGGUGAAGC.....	24	31070
.....GGGGAUUCUACUUUUGGUGAAG.....	22	331
.....GGGGAUUCUACUUUUGGUGAAGC.....	23	555
.....AGCGAGCUCAGAUACUUC.....	19	258
.....UUCACCGGGCUCGAAUCC.....	18	147
.....UUCACCGGGCUCGAAUCCUGU.....	22	13240
.....CACCGGGCUCGAAUCCUGUCC.....	22	188

#asu-miR-36d

AUCUCGCGUGGCAAGGAUUCGCUUUUGGUGACGUGGAGAAGAAUCUUCACCGGGCAAGAAUCCUGUCAUGUUGCCU

.....((((((((((((.....))))))))))..)))))).....

Total sRNA: 1388325 shared 5' end with miRNA: 227465 shared 3' end with miRNA: 9200

miRNA

.....UCACCGGGCAAGAAUCCUGUC.....	22	1110857
Shared 5' Terminus		
.....UCACCGGGCAAGAAUCC.....	18	126
.....UCACCGGGCAAGAAUCCU.....	19	534
.....UCACCGGGCAAGAAUCCUG.....	20	403
.....UCACCGGGCAAGAAUCCUGU.....	21	113939
.....UCACCGGGCAAGAAUCCUGUCA.....	23	112415
Shared 3' Terminus		
.....CGGGCAAGAAUCCUGUC.....	18	2160
.....CCGGGCAAGAAUCCUGUC.....	19	308
.....ACCGGGCAAGAAUCCUGUC.....	20	4149
.....CACCGGGCAAGAAUCCUGUC.....	21	288
.....UUCACCGGGCAAGAAUCCUGUC.....	23	2207
Subsequence		
.....ACCGGGCAAGAAUCCUGU.....	19	202
Others		
.....GCAGGGAUUCGCUUUUGGUGACG.....	24	307
.....CAGGGAUUCGCUUUUGG.....	18	114
.....CAGGGAUUCGCUUUUGGUGA.....	21	434
.....CAGGGAUUCGCUUUUGGUGAC.....	22	319
.....CAGGGAUUCGCUUUUGGUGACG.....	23	36824
.....CAGGGAUUCGCUUUUGGUGACGU.....	24	576
.....AGGGAUUCGCUUUUGGUGACG.....	22	215
.....UUCACCGGGCAAGAAUCCUGU.....	22	465
.....UUCACCGGGCAAGAAUCCUGUCA.....	24	245
.....CACCGGGCAAGAAUCCUGUCA.....	22	154
.....ACCGGGCAAGAAUCCUGUCA.....	21	364

.....UAUCACAGUCUACUUGCU.....	18	474
.....UAUCACAGUCUACUUGCUGU.....	20	973
.....UAUCACAGUCUACUUGCUGUC.....	21	999
.....UAUCACAGUCUACUUGCUGUCU.....	22	58649
.....UAUCACAGUCUACUUGCUGUCUCC.....	24	743

.....CAGUCUACUUGCUGUCUC.....	18	164
.....ACAGUCUACUUGCUGUCUC.....	19	86
.....AUCACAGUCUACUUGCUGUCUC.....	22	31
.....AUAUCACAGUCUACUUGCUGUCUC.....	24	416

.....ACAGUCUACUUGCUGUCU..... 18 99

GAUAGUAAGUACUGCGAUA	19 64
GAUAGUAAGUACUGCGAUAU	20 326
GAUAGUAAGUACUGCGAUAUG	21 16932
AUAGUAAGUACUGCGAUAUG	20 732
CUGCAAGAACACAAACACA	19 890
ACAUAUCACAGUCUACUUGCUGUCU	25 93
CAUAUCACAGUCUACUUGCUGUCU	24 51
AUAUCACAGUCUACUUGCUGUCU	23 721

[illegible]

Shared 5' Terminus		
.....	UAUCACAGUUCUUUGUCA.....	18 5568
.....	UAUCACAGUUCUUUGUCAC.....	19 5641
.....	UAUCACAGUUCUUUGUACC.....	20 30462
.....	UAUCACAGUUCUUUGUACCU.....	21 74263
.....	UAUCACAGUUCUUUGUACCUUU.....	23 6223

.....ACAGUUCUUUGUACCUU.....	18	3157
.....CACAGUUCUUUGUACCUU.....	19	427
.....UCACAGUUCUUUGUACCUU.....	20	250
.....AUCACAGUUCUUUGUACCUU.....	21	1426

.....CGUGGCAAAGGUGCUGCGAUGCG..... 23 648

Shared 5' Terminus			
.....	UAUCACAGUUCUUUGUCA	18	5568
.....	UAUCACAGUUCUUUGUCAC	19	5641
.....	UAUCACAGUUCUUUGUCACC	20	30462
.....	UAUCACAGUUCUUUGUCACCC	21	92878
.....	UAUCACAGUUCUUUGUCACCCUU	23	5580
.....	UAUCACAGUUCUUUGUCACCCUUU	24	229

.....ACAGUUCUUUGUCACCCU.....	18	6826
.....CACAGUUCUUUGUCACCCU.....	19	870
.....UCACAGUUCUUUGUCACCCU.....	20	616
.....AUCACAGUUCUUUGUCACCCU.....	21	3461

.....AUCACAGUUCUUUGUCACCC..... 20 104

```

.....CGUGGCAAGGAUACUGCGAUG..... 21 202
.....CGUGGCAAGGAUACUGCGAUGC..... 22 443
.....CGUGGCAAGGAUACUGCGAUGCG..... 23 11997
.....GGAAGGAUACUGCGAUGCGUC..... 22 104

```

.....UAUCACAGUUCUUUGUACCCU.....	22	2744612
Shared 5' Terminus		
.....UAUCACAGUUCUUUGUCA.....	18	5568
.....UAUCACAGUUCUUUGUCAC.....	19	5641
.....UAUCACAGUUCUUUGUACCC.....	20	30462
.....UAUCACAGUUCUUUGUACCCC.....	21	92878
.....UAUCACAGUUCUUUGUACCCUU.....	23	5580
.....UAUCACAGUUCUUUGUACCCUUU.....	24	229
Shared 3' Terminus		
.....ACAGUUCUUUGUACCCCU.....	18	6826
.....CAGAGUUCUUUGUACCCCU.....	19	870
.....UCACAGUUCUUUGUACCCCU.....	20	616
.....AUCACAGUUCUUUGUACCCCU.....	21	3461
Subsequence		
.....AUCACAGUUCUUUGUACCC.....	20	104
Others		
.....CGUGGCCAAAGAUACUGCGAUGC.....	22	135
.....CGUGGCCAAAGAUACUGCGAUGC.....	23	6699

Total sRNA: 743362 shared 5' end with miRNA: 75266 shared 3' end with miRNA: 1075

Sequence	Count	Percentage
.....UAUCACAGUCUUAUCCGGUCA.....	21	549241
Shared 5' Terminus		
.....UAUCACAGUCUUAUCCGGU.....	19	1328
.....UAUCACAGUCUUAUCCGGUC.....	20	2545
.....UAUCACAGUCUUAUCCGGUCAC.....	22	71332
Shared 3' Terminus		
.....CACAGUCUUAUCCGGUCA.....	18	114
.....AUCACAGUCUUAUCCGGUCA.....	20	159
.....GUAUCACAGUCUUAUCCGGUCA.....	22	758
Subsequence		
Others		
.....UAACCCGAUGUGGCUGCGAUACU.....	23	151
.....AACCCGAUGUGGCUGCGA.....	18	433
.....AACCCGAUGUGGCUGCGAU.....	19	915
.....AACCCGAUGUGGCUGCGAUA.....	20	816
.....AACCCGAUGUGGCUGCGAUAC.....	21	4544
.....AACCCGAUGUGGCUGCGAUACU.....	22	106650
.....AACCCGAUGUGGCUGCGAUACUG.....	23	109
.....ACCCGAUGUGGCUGCGAUACU.....	21	1812
.....ACCCGAUGUGGCUGCGAUACUG.....	22	1073
.....AUCACAGUCUUAUCCGGUCAC.....	21	517
.....ACAGUCUUAUCCGGUCAC.....	18	378

Shared 5' Terminus	UAUCACAGUUCUUUGCUACCUC	22	278943
	UAUCACAGUUCUUUGCUA	18	288
	UAUCACAGUUCUUUGCUAC	19	700
	UAUCACAGUUCUUUGCUACC	20	2656
	UAUCACAGUUCUUUGCUACCU	21	32492
	UAUCACAGUUCUUUGCUACCUCG	23	12484
	UAUCACAGUUCUUUGCUACCUCGU	24	128
Shared 3' Terminus	ACAGUUCUUUGCUACCUC	18	954
	UCACAGUUCUUUGCUACCUC	20	151
	AUCACAGUUCUUUGCUACCUC	21	1276


```

.....AUAUGUCUGGUAUUCUUGGGUU..... 22 103
.....GAUAUGUCUGGUAUUCUUGGGUU..... 23 128
.....UUGAUAUGUCUGGUAUUCUUGGGUU..... 25 324
Subsequence
.....AUGUCUGGUAUUCUUGGGU..... 19 118
Others
.....UUGAUAUGUCUGGUAUUCUUGGGU..... 24 74
.....ACCAGUAUCUCAGACGUAUCAU..... 22 656
.....ACCAGUAUCUCAGACGUAUCAUC..... 23 898
.....CCAGUAUCUCAGACGUAUCAU..... 21 1194
.....CCAGUAUCUCAGACGUAUCAUC..... 22 4246

```

#asu-miR-56

```

UGGACGGCCGGGCGAGACUAUCGUGGGUAUGUGCAUAUAUAUUAUACCCGUAAGUCUCCAUCGAGCUCCGGCUGUC
..((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((
Total sRNA: 263876 shared 5' end with miRNA: 30111 shared 3' end with miRNA: 850
miRNA

```

```

.....UACCCGUAAGUCUCCAUCGAG..... 21 232332
Shared 5' Terminus
.....UACCCGUAAGUCUCCAUC..... 18 2237
.....UACCCGUAAGUCUCCAUCG..... 19 1983
.....UACCCGUAAGUCUCCAUCGA..... 20 15647
.....UACCCGUAAGUCUCCAUCGAGC..... 22 9993
.....UACCCGUAAGUCUCCAUCGAGCU..... 23 251
Shared 3' Terminus
.....CCGUAAGUCUCCAUCGAG..... 18 89
.....AUACCCGUAAGUCUCCAUCGAG..... 22 662
Subsequence
Others
.....AUACCCGUAAGUCUCCAUCGA..... 21 301

```

#asu-miR-57

```

GUGGUUUCGUCUACCCUGUAGUACCGAGCUGUGUUUAGUGAUUAUGCAUACACGAUCGGUUGCCGGGUGAAUGACGCGUCGCC
(((((.....((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((
Total sRNA: 837154 shared 5' end with miRNA: 152202 shared 3' end with miRNA: 3927
miRNA

```

```

.....UACCCUGUAGUACCGAGCUGUGUU..... 25 677202
Shared 5' Terminus
.....UACCCUGUAGUACCGAGC..... 18 1679
.....UACCCUGUAGUACCGAGCU..... 19 4626
.....UACCCUGUAGUACCGAGCUG..... 20 1964
.....UACCCUGUAGUACCGAGCUGU..... 21 4194
.....UACCCUGUAGUACCGAGCUGUG..... 22 3104
.....UACCCUGUAGUACCGAGCUGUGU..... 23 21968
.....UACCCUGUAGUACCGAGCUGUGUU..... 24 113870
.....UACCCUGUAGUACCGAGCUGUGUUUG..... 26 716
Shared 3' Terminus
.....UAGUACCGAGCUGUGUUU..... 18 170
.....GUAGUACCGAGCUGUGUUU..... 19 1035
.....UGUAGUACCGAGCUGUGUUU..... 20 802
.....CUGUAGUACCGAGCUGUGUUU..... 21 985
.....CCUGUAGUACCGAGCUGUGUUU..... 22 166
.....ACCCUGUAGUACCGAGCUGUGUUU..... 24 233
.....CUACCCUGUAGUACCGAGCUGUGUUU..... 26 417
Subsequence
.....CUGUAGUACCGAGCUGUGUU..... 20 146
.....UGUAGUACCGAGCUGUGUU..... 19 229
.....GUAGUACCGAGCUGUGUU..... 18 423
Others
.....UACACGAUCGGUUGCCGGGUGAA..... 23 117
.....ACACGAUCGGUUGCCGGGUGA..... 21 188
.....ACACGAUCGGUUGCCGGGUGAA..... 22 2323

```

#asu-miR-67

```

GGGCACUAGCUCGCGGCGUGGUUGUUGAUGUUCUGAUGUUAUACACACCUCUUGAGUGAGUUGAAAGCCCUC
((((.....((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((
Total sRNA: 55470 shared 5' end with miRNA: 9136 shared 3' end with miRNA: 1776
miRNA

```


.....AGGCAAGAUUUGGCAUAGCUG.....	22	1275
.....AGGCAAGAUUUGGCAUAGCUGAA.....	24	3267
Shared 3' Terminus		
.....AGAUGUUGGCAUAGCUGA.....	18	105
.....AAGAUGUUGGCAUAGCUGA.....	19	528
.....CAAGAUGUUGGCAUAGCUGA.....	20	125
.....GCAAGAUGUUGGCAUAGCUGA.....	21	51
.....GGCAAGAUGUUGGCAUAGCUGA.....	22	55
.....CAGGCAAGAUGUUGGCAUAGCUGA.....	24	51
Subsequence		
Others		
.....AGCCGUGCUACAUAAAGGCCAUGC.....	23	23

[illegible]

GGCCAGUUAAGUGAAUGCUUUGCCACAGUCUUAGCAAUGAAUAAGCUGGGCUGAGGUUACACUUAACGUGGAGGCU
 ..(((((((((((((((.(((.(.(((.(.(((.....)))))))))))).)))))))).))))))....
 Total sRNA: 15878 shared 5' end with miRNA: 1137 shared 3' end with miRNA: 89
 miRNA

Sequence	Count	Percentage
.....UAAGUGAAUGCUUUGCCACAGUCU.....	24	14638
Shared 5' Terminus		
.....UAAGUGAAUGCUUUGCCA.....	18	29
.....UAAGUGAAUGCUUUGCCAC.....	19	26
.....UAAGUGAAUGCUUUGCCACA.....	20	64
.....UAAGUGAAUGCUUUGCCACAG.....	21	5
.....UAAGUGAAUGCUUUGCCACAGU.....	22	289
.....UAAGUGAAUGCUUUGCCACAGUC.....	23	706
.....UAAGUGAAUGCUUUGCCACAGUCUU.....	25	17
Shared 3' Terminus		
.....AAUGCUUUGCCACAGUCU.....	18	6
.....GAAUGCUUUGCCACAGUCU.....	19	11
.....UGAAUGCUUUGCCACAGUCU.....	20	20
.....GUGAAUGCUUUGCCACAGUCU.....	21	9
.....AGUGAAUGCUUUGCCACAGUCU.....	22	5
.....AAGUGAAUGCUUUGCCACAGUCU.....	23	7
.....UUAAGUGAAUGCUUUGCCACAGUCU.....	25	31
Subsequence		
Others		


```

.....AUUGCACUCGUCCCGGCCUGA..... 21 68
.....AUAUUGCACUCGUCCCGGCCUGA..... 23 9
Subsequence
Others
.....AGGCCGAGUCGUCUGCAU..... 18 6
.....AGGCCGAGUCGUCUGCAUU..... 19 40
.....AGGCCGAGUCGUCUGCAUUA..... 20 34
.....AGGCCGAGUCGUCUGCAUUUA..... 21 664
.....AGGCCGAGUCGUCUGCAUUUAU..... 22 2294

```

#asu-miR-100a-1

GGCGGUAACCCGUAGAUCCGAACUUGUGUUGUGUAUUUGGUAACGCAAUUCGCCUCUGGGUGCAUCGCUGAUUAG
(((((((.....)))))).....)).....
Total sRNA: 26254824 shared 5' end with miRNA: 12490303 shared 3' end with miRNA: 60351
miRNA

```

.....AACCCGUAGAUCCGAACUUGUGUU..... 24 13669488
Shared 5' Terminus
.....AACCCGUAGAUCCGAACU..... 18 15136
.....AACCCGUAGAUCCGAACUU..... 19 14911
.....AACCCGUAGAUCCGAACUUG..... 20 6824
.....AACCCGUAGAUCCGAACUUGU..... 21 164292
.....AACCCGUAGAUCCGAACUUGUG..... 22 238228
.....AACCCGUAGAUCCGAACUUGUGU..... 23 12030377
.....AACCCGUAGAUCCGAACUUGUGUU..... 25 19113
.....AACCCGUAGAUCCGAACUUGUGUUG..... 26 1374
Shared 3' Terminus
.....UAGAUCCGAACUUGUGUU..... 18 1119
.....GUAGAUCCGAACUUGUGUU..... 19 13262
.....CGUAGAUCCGAACUUGUGUU..... 20 23157
.....CCGUAGAUCCGAACUUGUGUU..... 21 7899
.....CCCGUAGAUCCGAACUUGUGUU..... 22 1213
.....ACCCGUAGAUCCGAACUUGUGUU..... 23 3766
.....AAACCCGUAGAUCCGAACUUGUGUU..... 25 9930
Subsequence
.....AACCCGUAGAUCCGAACUUGUGU..... 22 2503
.....CCCGUAGAUCCGAACUUGUGU..... 21 1124
.....CCGUAGAUCCGAACUUGUG..... 19 103
.....CCGUAGAUCCGAACUUGUGU..... 20 4013
.....CGUAGAUCCGAACUUGUG..... 18 333
.....CGUAGAUCCGAACUUGUGU..... 19 8612
.....GUAGAUCCGAACUUGUGU..... 18 8987
Others
.....AAACCCGUAGAUCCGAACUUGUG..... 23 475
.....AAACCCGUAGAUCCGAACUUGUGU..... 24 6456
.....CGCAAUUCGCCUCUGGGUGCA..... 22 1610

```

#asu-miR-100a-2

CGAUUCAUUGUGUACUGAAGCAGGGUGUGUGCGGUAACCCGUAGAUCCGAACUUGUGUUUGGUAACAUAGCUCGGCAGCUGGGUAGACUGGCUAUCCAGCCGCCACCCAAUUGCCCG
.....(((((((.....)))))).....)).....
Total sRNA: 26273001 shared 5' end with miRNA: 12489821 shared 3' end with miRNA: 51766
miRNA

```

.....AACCCGUAGAUCCGAACUUGUGUU..... 24 13669488
Shared 5' Terminus
.....AACCCGUAGAUCCGAACU..... 18 15136
.....AACCCGUAGAUCCGAACUU..... 19 14911
.....AACCCGUAGAUCCGAACUUG..... 20 6824
.....AACCCGUAGAUCCGAACUUGU..... 21 164292
.....AACCCGUAGAUCCGAACUUGUG..... 22 238228
.....AACCCGUAGAUCCGAACUUGUGU..... 23 12030377
.....AACCCGUAGAUCCGAACUUGUGUU..... 25 19113
.....AACCCGUAGAUCCGAACUUGUGUUG..... 26 297
.....AACCCGUAGAUCCGAACUUGUGUUGG..... 28 114
.....AACCCGUAGAUCCGAACUUGUGUUGGUG..... 29 137
.....AACCCGUAGAUCCGAACUUGUGUUGGUGUU..... 30 118
.....AACCCGUAGAUCCGAACUUGUGUUGGUGUUU..... 31 127
Shared 3' Terminus
.....UAGAUCCGAACUUGUGUU..... 18 1119
.....GUAGAUCCGAACUUGUGUU..... 19 13262
.....CGUAGAUCCGAACUUGUGUU..... 20 23157
.....CCGUAGAUCCGAACUUGUGUU..... 21 7899
.....CCCGUAGAUCCGAACUUGUGUU..... 22 1213
.....ACCCGUAGAUCCGAACUUGUGUU..... 23 3766
.....CAACCCGUAGAUCCGAACUUGUGUU..... 25 1275
Subsequence
.....AACCCGUAGAUCCGAACUUGUGU..... 22 2503
.....CCCGUAGAUCCGAACUUGUGU..... 21 1124
.....CCGUAGAUCCGAACUUGUG..... 19 103
.....CCGUAGAUCCGAACUUGUGU..... 20 4013
.....CGUAGAUCCGAACUUGUG..... 18 333
.....CGUAGAUCCGAACUUGUGU..... 19 8612

```


.....ACGUUUCGUUGCUCGGGUGCC..... 21 3900

GAUGGGCGGUGAACCCGUAUGCUGUUGGGUGUGUUGGGUUCGGUGACACGCUACGGUGUUCGGGUCCACCGAGGCGUC

Total sRNA: 2518817 shared 5' end with miRNA: 664035 shared 3' end with miRNA: 13557

.....AACCCGUAUGCUGUUGGGUGUGU..... 23 1837370

.....AACCCGUAUGCUGUUGGG..... 18 1980

.....AACCCGUAUGCUGUUGGGUG..... 20 1388

.....AACCCGUAUGCUGUUGGGUGUG..... 22 29059

AACCCGUAAGCUGUUGGGUGUGUUG..... 25 643

.....AACCCGGAAGCCGCGGCGGCGGCGGCGGCGG..... 20 107
Shared 3' Terminus

.....GUAUGGUGUUGGGUGUGU.....	18	3912
CGUAUGGUGUUGGGUGUGU	19	5789

..... CCGAUGGUGGUGGGUGUGU	20	2460
GGGGAUAGGAGUAGGAGGAGAGU	21	284

.....ACCCGUAUGCUGUUGGGUGUGU..... 22 1003

.....CCGUAUGCUGUUGGGUGU..... 18 650

.....CGUAUGCUGUUGGGUGUG..... 18 365

.....ACCCGUAUGCUGUUGGGUGUGUU..... 23 143

.....CGUAUGCUGUUGGGUGUGUU..... 20 788

.....UAUGCUGUUGGGUGUGUU..... 18 108

UGUGUGCGGUGAACCGAGGACCGUAUGCUGUGUUUGGAUAGGUAACACGCAACGGUGUUCGGGUCCACUAAAGCAUCC

Total sRNA: 724731 shared 5' end with miRNA: 319436 shared 3' end with miRNA: 5719

.....AACCUGAGGACCGUAUGCUGUGUU..... 24 396545

Shared 5' Terminus

.....AACCUGAGGACCGUAUGC..... 18 2302

.....AACCUGAGGACCGUAUGCUG.....	20	2814
--------------------------------	----	------

.....AACCCGAGGAGCCGAGCCCGG.....	21 7020
.....AACCGAGGACCGAAGCGUG.....	22 7368

.....AACCUGAGGACCGUAUGCUGUGU..... 23 2619
AACCUAGAGGACCGUAUGCUGUGUUU 25 3263

Shared 3' Terminus
AGGACCGAAGCGUGGUA 18 119

.....AGGACCGGAGCGCGGCGG.....	18	119
GAGGACCGGAGCGCGGCGG	19	1045

.....GAGGACCGGAAAGCGGGGGG.....	19	1049
UAGAGACCGGAAAGCGGUGUU	20	3479

.....CCAGCAGCCGAGCCGCGCGG.....	20	3479
CUGAGGACCGUAUGCUGUGUU	21	779

CCUAGAGGACCGUAUGCUGUGUU 22 115

.....ACCGAGGACCGGAGCGCGGGG..... 25 177
Subsequence

.....ACCGAGGACCGUAUGCUGUGU..... 22 124

.....	22	224
.....CUGAGGACCGUAUGCUGUGU.....	20	342

.....GAGGACCGGAGCGCGGG.....	19	1030
GAGGACCGGAGCGCGGG	18	368

Others	UGAACCUGAGGACCGUAUGCUGUGU	25 117
--------	---------------------------	--------

.....UGAGGACCGDAUGCUGUGUU..... 21 167
CAGCGAACGGUGUUGGGGUGCA 22 248

#asu-miR-137

AGCAAAAGGUAAUUCUCCGGUAAUGACAUAUGUGCAUUGAAAGCUGUUAUUGCUUGAGAAUACAAAUUGUUGUCCGGC

(((((...((((((((((((...(((...)))))))))))).))))))....

Total sRNA: 5713 shared 5' end with miRNA: 202 shared 3' end with miRNA: 12

miRNA

.....UUAUUGCUUGAGAAUACAAU..... 21 5447

Shared 5' Terminus

.....UUAUUGCUUGAGAAUACA..... 18 6

.....UUAUUGCUUGAGAAUACAA..... 19 13

.....UUAUUGCUUGAGAAUACAAA..... 20 96

.....UUAUUGCUUGAGAAUACAAAU..... 22 87

Shared 3' Terminus

.....AUUGCUUGAGAAUACAAU..... 19 3

.....UAUUGCUUGAGAAUACAAU..... 20 4

.....GUUAUUGCUUGAGAAUACAAU..... 22 2

.....UGUUAUUGCUUGAGAAUACAAU..... 23 3

Subsequence

Others

.....AGGUAAUUCUCCGGUAAUGACA..... 21 30

.....AGGUAAUUCUCCGGUAAUGACAU..... 22 9

.....CUGUUAUUGCUUGAGAAUACAAA..... 23 7

#asu-miR-184

UGAUUUUGAGUGCUUAUCAGCUGCCAGCCUGUUGCAACUUGAAACUGGACGGAAGACUGAUAGAGCCUCAAUUUUGCCC

.(((.(((...(((((((((...(((...)))))))))))).))))))....

Total sRNA: 9876 shared 5' end with miRNA: 4619 shared 3' end with miRNA: 21

miRNA

.....UGGACGGAAGACUGAUAGAGC..... 22 5145

Shared 5' Terminus

.....UGGACGGAAGACUGAUAA..... 18 5

.....UGGACGGAAGACUGAUAG..... 19 17

.....UGGACGGAAGACUGAUAGA..... 20 157

.....UGGACGGAAGACUGAUAGAG..... 21 469

.....UGGACGGAAGACUGAUAGAGCC..... 23 2663

.....UGGACGGAAGACUGAUAGAGCCU..... 24 1295

.....UGGACGGAAGACUGAUAGAGCCUC..... 25 13

Shared 3' Terminus

.....CGGAAGACUGAUAGAGC..... 18 2

.....GACGGAAGACUGAUAGAGC..... 20 4

.....CUGGACGGAAGACUGAUAGAGC..... 23 13

Subsequence

Others

.....UGCUUAUCAGCUGCCAGCCUGU..... 23 12

.....UGCUUAUCAGCUGCCAGCCUGUU..... 24 5

.....GCUUAUCAGCUGCCAGCCUGUU..... 23 3

.....CUGGACGGAAGACUGAUAG..... 20 2

.....CUGGACGGAAGACUGAUAGAGCC..... 24 38

.....GGACGGAAGACUGAUAGAGCC..... 22 4

.....GGACGGAAGACUGAUAGAGCCU..... 23 6

.....GGAAGACUGAUAGAGCC..... 18 2

.....GGAAGACUGAUAGAGCCU..... 19 8

#asu-miR-228

CGUACACUCAUUGGCACUAGAUGAAUUCACGGUCCUUUUUGCUGUUCGGUGUAUUCACCAGUCCAUAGAGUUGCGUUGGC

(((((((((((((((((...(((...)))))))))))).))))))....

Total sRNA: 107629 shared 5' end with miRNA: 22084 shared 3' end with miRNA: 449

miRNA

.....AAUGGCACUAGAUGAAUUCACGG..... 23 84630

Shared 5' Terminus

.....AAUGGCACUAGAUGAAUU..... 18 99

.....AAUGGCACUAGAUGAAUUC..... 19 64

.....AAUGGCACUAGAUGAAUUCA..... 20 284

.....AAUGGCACUAGAUGAAUUCAC..... 21 330

.....AAUGGCACUAGAUGAAUUCACG..... 22 15979

.....AAUGGCACUAGAUGAAUUCACGGU..... 24 5323

Shared 3' Terminus

.....CACUAGAUGAAUUCACGG..... 18 155

.....GCACUAGAUGAAUUCACGG..... 19 61

.....GGCACUAGAUGAAUUCACGG..... 20 77

.....AUGGCACUAGAUCAAUUCACGG.....	22	104
.....CAUUGGCACUAGAUCAAUUCACGG.....	24	34
Subsequence		
.....GGCACUAGAUCAAUUCACGG.....	19	34
Others		
.....AUGGCACUAGAUCAAUUCACGGU.....	23	224
.....UGUAUUCACCAGUCCAUAGAG.....	22	12

UUACUGGGCGUCACUGGAGCUGGCUUACCGUCUAGUGCAUGUAAUGUGAAAUCAUGACUAGACUGGUAACCGUCUCUAGUUUCGUUCCU
.....((((((..(((((((..((..((((((((((((((..((((.....)))))))))))))).)))))).))))))))..))))).

miRNA

Shared 5' Terminus

.....UGACUAGACUGGUAACCUG.....19 3201

UGACUAGACUGGUAACCUGCU 21 68507

Shared 3' Terminus

CUAGACUGGUAACCGUCUC	19	320
---------------------	----	-----

.....ACGAGACGGGGAACCGGCUC.....	20	243
GACUAGACUGGUAACCGGCUC	21	440

.....AUGACUAGACUGGUAACCGUCUC..... 23 223
Subsequence

Others
UNACUS

.....GCUGGCCUACCGUCUAGUGCAU.....	22 816
.....GCHCCGCHUACCGCHUACCHCCAHG.....	23 817

GUUUUCACUCUUCGCAAGCGAACUGAUCAAACCCACACUCGGUGACGGACGUUUUGUUCGUUUUGCUUGCGAUCAGUGCGAGCGUAC
(((.((((.((((((((((.((((.(((((((.....(((....)))..)))))).)))..)))))))).))))..))))....

miRNA

Shared 5' Terminus

UUUGUUCGUUUUGCUUGCG 19 1364

	UUUGUUCGUUUUGC	UUGCGAU	29	2688
	UUUGUUCGUUUUGC	UUGCGAU	21	24162

.....000G00C00000GC00GC0A0C..... ZZ 78838
UUUGUUCGUUUUGCUUGCGAU0AG 24 310

Shared 3' Terminus

UCCUUUUUCCUUUCCGAUCA 18,608

.....UUCGUUUUGCUUGCGAUC..... 19 718
UUCUUGCUUUUUGCUUGCGAUC..... 22 1584

.....UUUUGUUCGUUUUGCUGCAUCA..... 24 148

.....UUGUUCGUUUUGCUUGCGAU..... 20 108

Others _____

.....UUCGCAAGCGAACUGAUC..... 19 132

.....UUCGCAAGCGAACUGAUCAA..... 21 1453

.....UUCGCAAGCGAACUGAUCAAAAC..... 23 27361

UGGCAGUUGGAGGUUAGAUUCGCGGCAGAGCAUUAUCGGUUAUUGCCAGAUCAUUUACUCCAACUGACAUCGACUCGU
((.((((((((((((((((((((((.(((.(.((((.....)))))).)))))))))))).)))))))))))).)).....

miRNA

Shared 5' Terminus

.....CCAGAGCCGAGGACGCCCCA.....	18 207
.....CCAGAGCAGGACGCCCCA.....	19 1052

.....CCAGAUCCUAGUACUUCCAAC.....	20	215
CCAGAUUUAUUACUUCCAACU	21	886

.....CCAGAUCCUACUCCACACUG..... 22 6716
Shared 3' Terminus

.....UCUAAUACUCCAACUGA.....	18	68
.....AUGCAAUACUUGCAAGUCA.....	19	22

.....AUCUAGUACUCCAACUGA..... 19 22

.....UACCCUGUAGAAGCGUGUUUAUC.....	23	168
.....UACCCUGUAGAAGCGUGUUUAUCU.....	24	42
.....ACCCUGUAGAAGCGUGUUUA.....	20	48
.....ACCCUGUAGAAGCGUGUUUAU.....	21	739
..... ACCCUGUAGAAGCGUGUUUAUC	22	1455
.....ACCCUGUAGAAGCGUGUUUAUCU.....	23	1249
.....AUAAGCUCGUCUCUACAGGCA.....	21	103
.....AUAAGCUCGUCUCUACAGGCAG.....	22	439
.....AUAAGCUCGUCUCUACAGGCAGGA.....	24	430
.....AAGCUCGUCUCUACAGGCAGGA.....	22	42

.....UAAGGCACUGGAUUGGUCAGUU..... 22 6433
Subsequence
Others
.....UAAGGCACUGGAUUGGUCAGU..... 21 248

#asu-miR-5346

UGCAGUAGAUAGCUGGAGUUGCCCUACGACUGUGUGGAACGGUCCAGUCGUUGGGAAACUCAAGCCAUCGGGUGUUGUCAGU

.(((.(.(((.((((.((((.((((.((((.(.....).)))))).)))))).))))).))))......

Total sRNA: 521153 shared 5' end with miRNA: 31570 shared 3' end with miRNA: 9210

miRNA

.....UCGUUGGGAAACUCAAGCCAU..... 21 402510

Shared 5' Terminus

.....UCGUUGGGAAACUCAAGC..... 18 2043
.....UCGUUGGGAAACUCAAGCC..... 19 4757
.....UCGUUGGGAAACUCAAGCCA..... 20 24074
.....UCGUUGGGAAACUCAAGCCAUC..... 22 667

Shared 3' Terminus

.....UUGGGAAACUCAAGCCAU..... 18 119
.....GUUGGGAAACUCAAGCCAU..... 19 2449
.....CGUUGGGAAACUCAAGCCAU..... 20 268
.....GUCGUUGGGAAACUCAAGCCAU..... 22 6090
.....AGUCGUUGGGAAACUCAAGCCAU..... 23 251

Subsequence

.....GUUGGGAAACUCAAGCCA..... 18 186

Others

.....AGCUGGAGUUGCCCUACG..... 18 1949
.....AGCUGGAGUUGCCCUACGA..... 19 843
.....AGCUGGAGUUGCCCUACGAC..... 20 624
.....AGCUGGAGUUGCCCUACGACU..... 21 8785
.....AGCUGGAGUUGCCCUACGACUG..... 22 60034
.....AGCUGGAGUUGCCCUACGACUGU..... 23 4179
.....UGGAGUUGCCCUACGACUG..... 19 102
.....GUCGUUGGGAAACUCAAGCC..... 20 127
.....GUCGUUGGGAAACUCAAGCCA..... 21 451

#asu-miR-5347

CUCUGCUUACAUUCGGCUUCCCUCAACGCCGCGUGCUACCAGCCACAGCAGCGACGGUGUUGACGGAGGUCGAGUGUAGACAGA

.(((.(.(((.((((.((((.((((.((((.(.....).)))))).)))))).))))).))))......

Total sRNA: 2600512 shared 5' end with miRNA: 772879 shared 3' end with miRNA: 20029

miRNA

.....CGACGGUGUUGACGGAGGUCGAG..... 23 1797736

Shared 5' Terminus

.....CGACGGUGUUGACGGAGG..... 18 10231
.....CGACGGUGUUGACGGAGGU..... 19 19912
.....CGACGGUGUUGACGGAGGUC..... 20 25209
.....CGACGGUGUUGACGGAGGUCG..... 21 224776
.....CGACGGUGUUGACGGAGGUCGA..... 22 366845
.....CGACGGUGUUGACGGAGGUCGAGU..... 24 124794
.....CGACGGUGUUGACGGAGGUCGAGUG..... 25 835
.....CGACGGUGUUGACGGAGGUCGAGUGU..... 26 260

Shared 3' Terminus

.....GUGUUGACGGAGGUCGAG..... 18 1893
.....GGUGUUGACGGAGGUCGAG..... 19 2521
.....CGGUGUUGACGGAGGUCGAG..... 20 600
.....ACGGUGUUGACGGAGGUCGAG..... 21 301
.....GACGGUGUUGACGGAGGUCGAG..... 22 9915
.....GCGACGGUGUUGACGGAGGUCGAG..... 24 296
.....AGCGACGGUGUUGACGGAGGUCGAG..... 25 4494

Subsequence

.....GACGGUGUUGACGGAGGUC..... 19 136
.....GACGGUGUUGACGGAGGUCG..... 20 886
.....GACGGUGUUGACGGAGGUCGA..... 21 1679
.....CGGUGUUGACGGAGGUCGA..... 19 198
.....GGUGUUGACGGAGGUCGA..... 18 651

Others

.....CGGCUUCCCUCAACGCCGCGUC..... 22 285
.....CGGCUUCCCUCAACGCCGCGUCU..... 23 228
.....AGCGACGGUGUUGACGGAGG..... 20 113
.....AGCGACGGUGUUGACGGAGGU..... 21 266
.....AGCGACGGUGUUGACGGAGGUC..... 22 304

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.....AGCGACGGUUGACGGAGGUCG..... 23 902
.....AGCGACGGUUGACGGAGGUCGA..... 24 1563
.....AGCGACGGUUGACGGAGGUCGAGU..... 26 386
.....GCGACGGUUGACGGAGGUCG..... 22 128
.....GCGACGGUUGACGGAGGUCGA..... 23 154
.....GACGGUUGACGGAGGUCGAGU..... 23 563
.....GGUUGACGGAGGUCGAGU..... 20 200
.....GUGUUGACGGAGGUCGAGU..... 19 123
.....UGUUGACGGAGGUCGAGU..... 18 324

```

#asu-miR-5348

```

CUAGGUACGUGACAGAAGUUGAGUCUAGUUGAGACUGAUUGUUUCACCGGGCAACAACUUCUGUCUGUGGUAGUAG
...((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((
Total sRNA: 91080 shared 5' end with miRNA: 5711 shared 3' end with miRNA: 1655
miRNA

```

```

.....UCACCGGGCAACAACUUCUGUC..... 22 80692
Shared 5' Terminus
.....UCACCGGGCAACAACUUC..... 18 28
.....UCACCGGGCAACAACUUCU..... 19 99
.....UCACCGGGCAACAACUUCUG..... 20 77
.....UCACCGGGCAACAACUUCUGU..... 21 4266
.....UCACCGGGCAACAACUUCUGUCU..... 23 1238
Shared 3' Terminus
.....CGGGCAACAACUUCUGUC..... 18 1312
.....CCGGGCAACAACUUCUGUC..... 19 35
.....ACCGGGCAACAACUUCUGUC..... 20 229
.....CACCGGGCAACAACUUCUGUC..... 21 32
.....CUCACCGGGCAACAACUUCUGUC..... 23 46
Subsequence
Others
.....CAGAAGUUGAGUCUAGUUGAG..... 21 51
.....CAGAAGUUGAGUCUAGUUGAGA..... 22 2654
.....CAGAAGUUGAGUCUAGUUGAGACUGAUUGUUUC..... 34 185

```

#asu-miR-5349

```

UCGUCUUGGGCUGCUCUGGAUGAGCCAGCUUGAGAAUUCAGAAAUCUGGCACACCCGGUGGCAUUCUAUCCGGCAAUUAU
...((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((
Total sRNA: 628684 shared 5' end with miRNA: 75136 shared 3' end with miRNA: 4160
miRNA

```

```

.....CUGCUCUCGGAUGAGCCAGCUU..... 22 530659
Shared 5' Terminus
.....CUGCUCUCGGAUGAGCCA..... 18 295
.....CUGCUCUCGGAUGAGCCAG..... 19 693
.....CUGCUCUCGGAUGAGCCAGC..... 20 12917
.....CUGCUCUCGGAUGAGCCAGCU..... 21 58156
.....CUGCUCUCGGAUGAGCCAGCUUGAGAAUUCAGAAA..... 35 2698
Shared 3' Terminus
.....UCUCGGAUGAGCCAGCUU..... 18 636
.....CUCUCGGAUGAGCCAGCUU..... 19 165
.....UGCUCUCGGAUGAGCCAGCUU..... 21 3257
Subsequence
.....UGCUCUCGGAUGAGCCAGCU..... 20 192
Others
.....UGGGCUGCUCUCGGAUGAGCCAG..... 23 450
.....UCUGGCACACCCGGUGGCAUU..... 21 525
.....UCUGGCACACCCGGUGGCAUUC..... 22 17142

```

#asu-miR-5350a

```

CCGCCGGAGGAGUUUCACGAGCUGCUAAAUUGUGAAUCGGCUAAAUUGGCACGCCUGAAAAACUACUCUUGUAGG
((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((
Total sRNA: 184799 shared 5' end with miRNA: 4964 shared 3' end with miRNA: 279
miRNA

```

```

.....UUUGGCACGCCUGAAAAACUAC..... 22 174408
Shared 5' Terminus
.....UUUGGCACGCCUGAAAAA..... 18 1385
.....UUUGGCACGCCUGAAAAAC..... 19 181
.....UUUGGCACGCCUGAAAAACU..... 20 1074
.....UUUGGCACGCCUGAAAAACUA..... 21 2230

```

Category	Sequence	Count	Percentage
Shared 3' Terminus	UUUGGCACGCCUGAAAAACUACU	23	94
	UUGGCACGCCUGAAAAACUAC	21	168
Subsequence			
Others			
	AGUUUCUCAGGACUGCUA	18	88
	AGUUUCUCAGGACUGCUAAAU	21	289
	AGUUUCUCAGGACUGCUAAAUU	22	4586

CGGCGGCCUUUCUGGGUAAGCUAAAUUGUUUUUGUGCGAAAUUUGGCACGCCCGUGGAAUGCCCAUUGCAGUAU		
..(((((((.((((.((((.((((.((((.(.....)))))))).)))))).))))).)))....		
Total sRNA: 80747 shared 5' end with miRNA: 6438 shared 3' end with miRNA: 220		
miRNA		
.....UUUGGCACGCCCGUGGAAUGCC.....	22	65919
Shared 5' Terminus		
.....UUUGGCACGCCCGUGGAA.....	18	44
.....UUUGGCACGCCCGUGGAAU.....	19	251
.....UUUGGCACGCCCGUGGAAUG.....	20	413
.....UUUGGCACGCCCGUGGAAUGC.....	21	5465
.....UUUGGCACGCCCGUGGAAUGCCC.....	23	264
Shared 3' Terminus		
.....UUUGGCACGCCCGUGGAAUGCC.....	21	167
.....AUUUGGCACGCCCGUGGAAUGCC.....	23	28
Subsequence		
.....UUUGGCACGCCCGUGGAAUGC.....	20	24
Others		
.....CCUUUCUCGGGUAAGCUAAA.....	20	25
.....CCUUUCUCGGGUAAGCUAAAU.....	21	446
..... CCUUUCUCGGGUAAGCUAAAUU	22	7557
.....CUUUCUCGGGUAAGCUAAAUU.....	21	24
.....AUUUGGCACGCCCGUGGAAUGC.....	22	23

GUACCAAGUCAGGUUUUACUA AUGACCAA AUUGUUUCAAGCGAAU UUGGCACAUGUAAUACCUGCCUUGGUUGCU (((((((((((((((((((((...((((((((((((((((.....)).)))))))))..))))).))))).))))).		
Total sRNA:	10126 shared 5' end with miRNA:	1893 shared 3' end with miRNA: 229
miRNA		
.....UUUUGGCACAUGUAAUACCUGCC.....	22	7914
Shared 5' Terminus		
.....UUUUGGCACAUGUAAUACC.....	18	68
.....UUUUGGCACAUGUAAUACCU.....	19	84
.....UUUUGGCACAUGUAAUACCUG.....	20	43
.....UUUUGGCACAUGUAAUACCUGC.....	21	1622
.....UUUUGGCACAUGUAAUACCUGCCU.....	23	76
Shared 3' Terminus		
.....UUGGCACAUGUAAUACCUGCC.....	21	217
.....AUUUGGCACAUGUAAUACCUGCC.....	23	7
Subsequence		
.....UUGGCACAUGUAAUACCU.....	18	3
.....UUGGCACAUGUAAUACCUGC.....	20	10
Others		
.....CAGGUUUUACUA AUGACCAA AU.....	23	9
.....CAGGUUUUACUA AUGACCAA AUUGUUUCAAGCGA.....	34	4
.....CAGGUUUUACUA AUGACCAA AUUGUUUCAAGCGAA.....	35	14
.....AUUUGGCACAUGUAAUACCUGC.....	22	35
.....UUGGCACAUGUAAUACCUGCCU.....	22	4

```
AAGUCCUCAGAAGGCGCUCAGAAUGUGCAUCGUAGUUACUGAAUCGUUGCACAUGUUGAACGACCUGCUGGGUGGCCUC  
..(..(((.(.(((.(.(((((.(.(((((.((.....)))...)))).))))).))))).)))....  
Total sRNA: 366423 shared 5' end with miRNA: 21439 shared 3' end with miRNA: 1090  
miRNA  
..... UUGCACAUGUUGAACGACCUGCU ..... 23 300552  
Shared 5' Terminus  
..... UUGCACAUGUUGAACGAC ..... 18 2863  
..... UUGCACAUGUUGAACGACC ..... 19 2760  
..... UUGCACAUGUUGAACGACCU ..... 20 1801  
..... UUGCACAUGUUGAACGACCUG ..... 21 4740  
..... UUGCACAUGUUGAACGACCUGC ..... 22 8925  
..... UUGCACAUGUUGAACGACCUGCUG ..... 24 344  
Shared 3' Terminus  
..... CAUGUUGAACGACCUGCU ..... 18 528  
..... ACAUGUUGAACGACCUGCU ..... 19 282  
Subsequence  
Others  
..... AAGGCGCUCAGAAUGUGCAU ..... 20 115  
..... AAGGCGCUCAGAAUGUGCAUC ..... 21 1008
```


CACCGAUUCUGAACACCUCAAGAGAUACAACGCUGUUUUGGUAACGGUGUGCCCCUUGAGGUGUUUAGAAUGAUGUGGUGUA
(((((((((((((((((((((((...((((((((...)))))))))...)))))))))...))))).)))).
Total sRNA: 8080 shared 5' end with miRNA: 403 shared 3' end with miRNA: 162

miRNA

GCAUUUUCUUUUUCGUUACACCUCGGAAGAAUGUGGAGAAAUAUUUUUUUAUCUACUAAUUUCCGAGGUGGAAGGGAAGACGUGC
(((((((.....)))))))))..)))))..)))))..)))))..)))))..)))))..)))))..)))))..)))))..)))))..)))))
Total sRNA: 119818 shared 5' end with miRNA: 4914 shared 3' end with miRNA: 10824
miRNA

.....UCGUUCACCUCGGAAAUAGUGGA..... 23 85260

miRNA
**AAAUCUCGUCCGGUAGUAUAUGC**..... 23 117257
 Shared 5' Terminus
AAAUCUCGUCCGGUAGUA..... 18 90
AAAUCUCGUCCGGUAGUAU..... 19 103
AAAUCUCGUCCGGUAGUAUA..... 20 252
AAAUCUCGUCCGGUAGUAUAU..... 21 628
AAAUCUCGUCCGGUAGUAUAUG..... 22 7731
 Shared 3' Terminus
UCGUCCGGUAGUAUAUGC..... 18 132
CUCGUCCGGUAGUAUAUGC..... 19 371
UCUGUCCGGUAGUAUAUGC..... 20 71
AUCUGUCCGGUAGUAUAUGC..... 21 65
AAUCUGUCCGGUAGUAUAUGC..... 22 112
UAAAUUCUGUCCGGUAGUAUAUGC..... 24 143
 Subsequence
 Others
AUUGCAACCGGUGGAGAUUCC..... 21 112
AUUGCAACCGGUGGAGAUUCCA..... 22 1848

#asu-miR-5363

UCGUACGCUGAUGGGCAAAGUUUCUGAACCGUGUUGUGUUAAGGCUAACGGUUUGGCACUUGCCCAGCACUGUAUGAC
 ((((((((((((.....)))))))).))))).
 Total sRNA: 2478826 shared 5' end with miRNA: 241482 shared 3' end with miRNA: 37205
 miRNA

.....**AUGGGCAAAGUUUCUGAACCGUGU**..... 24 2198129
 Shared 5' Terminus
AUGGGCAAAGUUUCUGAA..... 18 3246
AUGGGCAAAGUUUCUGAAC..... 19 3066
AUGGGCAAAGUUUCUGAACCG..... 20 15443
AUGGGCAAAGUUUCUGAACCG..... 21 6338
AUGGGCAAAGUUUCUGAACCGU..... 22 50075
AUGGGCAAAGUUUCUGAACCGUG..... 23 141587
AUGGGCAAAGUUUCUGAACCGUGUU..... 25 20259
AUGGGCAAAGUUUCUGAACCGUGUUG..... 26 436
AUGGGCAAAGUUUCUGAACCGUGUUGU..... 27 686
AUGGGCAAAGUUUCUGAACCGUGUUGUGU..... 29 220
 Shared 3' Terminus
AAAGUUUCUGAACCGUGU..... 18 14091
CAAAGUUUCUGAACCGUGU..... 19 1769
GCAAAGUUUCUGAACCGUGU..... 20 4517
GGCAAAGUUUCUGAACCGUGU..... 21 1697
UGGGCAAAGUUUCUGAACCGUGU..... 23 15065
 Subsequence
UGGGCAAAGUUUCUGAACCGU..... 21 261
UGGGCAAAGUUUCUGAACCGUG..... 22 463
GGCAAAGUUUCUGAACCGU..... 19 139
GCAAAGUUUCUGAACCGU..... 18 138
 Others
UGGGCAAAGUUUCUGAACCGUGUU..... 24 152
AAAGUUUCUGAACCGUGUU..... 19 363
ACGGUUUGGCACUUGCCCAGCA..... 22 16

#asu-miR-5364

UGAACUCAGCUAUGGACUUUACUCCUCUGCUAAUUUUUUCUGCAGAGGUAUUGUUUAUUGGCUAAGAUCAAAGCUCGAGC
 ((((((((((((.....)))))))).))))).
 Total sRNA: 553346 shared 5' end with miRNA: 30396 shared 3' end with miRNA: 2129
 miRNA

.....**AGAGGUUAUUGUUUAUUGGCUAA**..... 22 520637
 Shared 5' Terminus
AGAGGUUAUUGUUUAUUGG..... 18 3377
AGAGGUUAUUGUUUAUUGGC..... 19 340
AGAGGUUAUUGUUUAUUGGCU..... 20 14155
AGAGGUUAUUGUUUAUUGGCUA..... 21 11761
AGAGGUUAUUGUUUAUUGGCUAAG..... 23 740
 Shared 3' Terminus
GUAUUGUUUAUUGGCUAA..... 18 395
GGUAUUGUUUAUUGGCUAA..... 19 572
AGGUUAUUGUUUAUUGGCUAA..... 20 740

```

.....GAGGUUUUUUUUUUGGCUAA..... 21 145
.....CAGAGGUUUUUUUUUUGGCUAA..... 23 277
Subsequence
Others
.....AGCUAAUGGACUUUACUCCUCUGC..... 25 7

```

#asu-miR-5365a

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UCAGCUAGAUCAAGCUGUCCAUUCUUAUCAAUAAAUCUAAUUCAGGAUGAUUAAGAAGGAACAACUGAUUUUACUGAGUGC
((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((
Total sRNA: 101089 shared 5' end with miRNA: 31057 shared 3' end with miRNA: 673
miRNA
.....UGAUUAAGAAGGAACAACUGAU..... 22 64267
Shared 5' Terminus
.....UGAUUAAGAAGGAACAAC..... 18 126
.....UGAUUAAGAAGGAACAACU..... 19 576
.....UGAUUAAGAAGGAACAACUG..... 20 763
.....UGAUUAAGAAGGAACAACUGA..... 21 7669
.....UGAUUAAGAAGGAACAACUGAU..... 23 21820
.....UGAUUAAGAAGGAACAACUGAUUU..... 24 102
Shared 3' Terminus
.....UAAGAAGGAACAACUGAU..... 18 53
.....UUAAGAAGGAACAACUGAU..... 19 62
.....AUUAAGAAGGAACAACUGAU..... 20 258
.....GAUUAAGAAGGAACAACUGAU..... 21 208
.....AUGAUUAAGAAGGAACAACUGAU..... 23 88
Subsequence
.....AUUAAGAAGGAACAACUGA..... 19 35
Others
.....CAGCUGUCCAUUCUUAUCA..... 20 40
.....CAGCUGUCCAUUCUUAUCAU..... 21 422
.....CAGCUGUCCAUUCUUAUCAUA..... 22 218
.....GAUGAUUAAGAAGGAACAACUGA..... 23 75
.....GAUUAAGAAGGAACAACUGAUU..... 22 97
.....AUUAAGAAGGAACAACUGAUU..... 21 2172
.....AUUAAGAAGGAACAACUGAUUU..... 22 306
.....UUAAGAAGGAACAACUGAUU..... 20 41
.....UUAAGAAGGAACAACUGAUUU..... 21 32
.....UAAGAAGGAACAACUGAUU..... 19 38
.....AAGAAGGAACAACUGAUU..... 18 35

```

#asu-miR-5365b

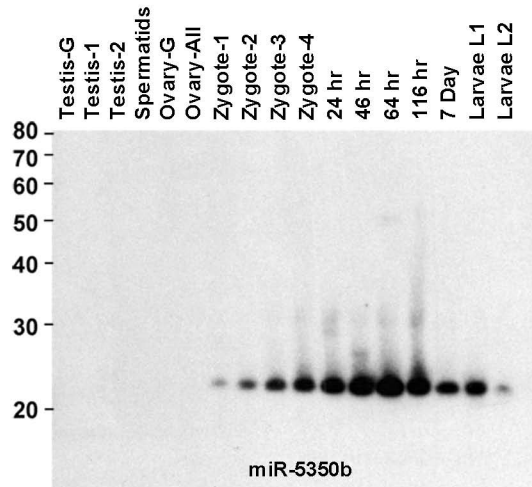
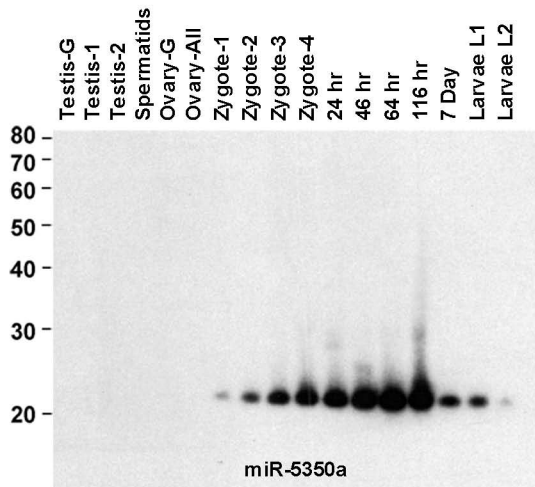
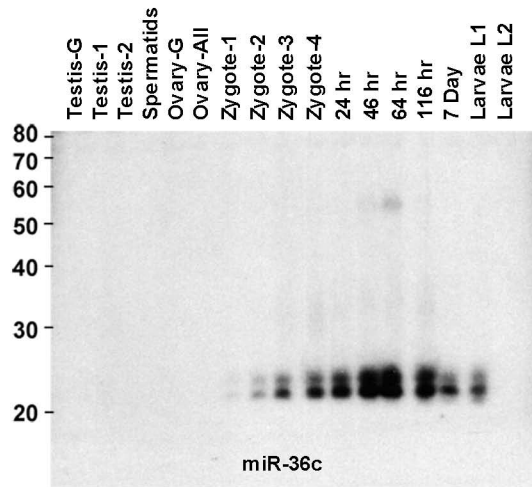
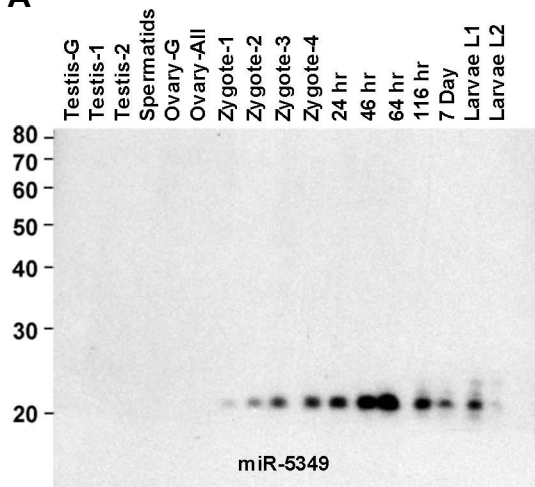
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Total sRNA: 189766 shared 5' end with miRNA: 51790 shared 3' end with miRNA: 562
miRNA
.....UGAUUAAGAAGAAACAACUGAU..... 22 130245
Shared 5' Terminus
.....UGAUUAAGAAGAAACAAC..... 18 427
.....UGAUUAAGAAGAAACAACU..... 19 1815
.....UGAUUAAGAAGAAACAACUG..... 20 1311
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Shared 3' Terminus
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Subsequence
Others
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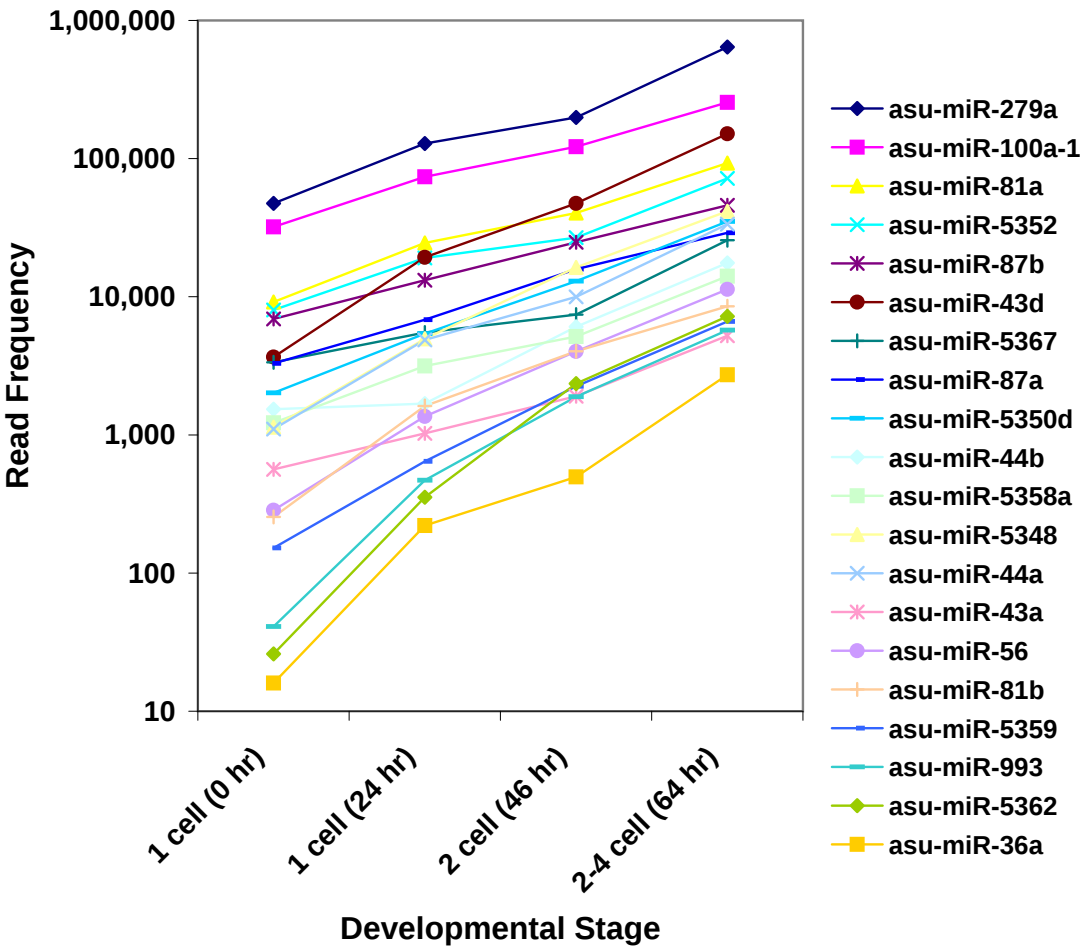
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Wang et al. Supplementary Figure 6A

A



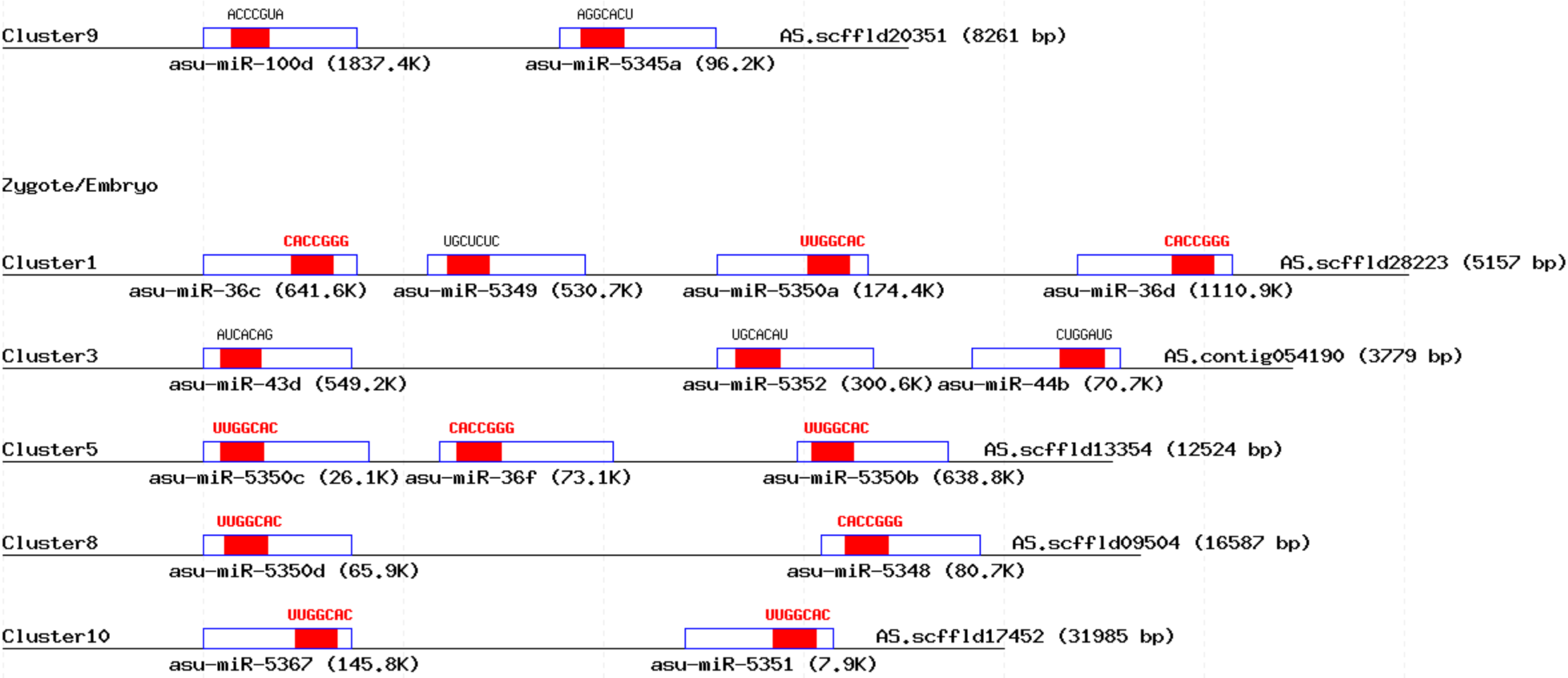
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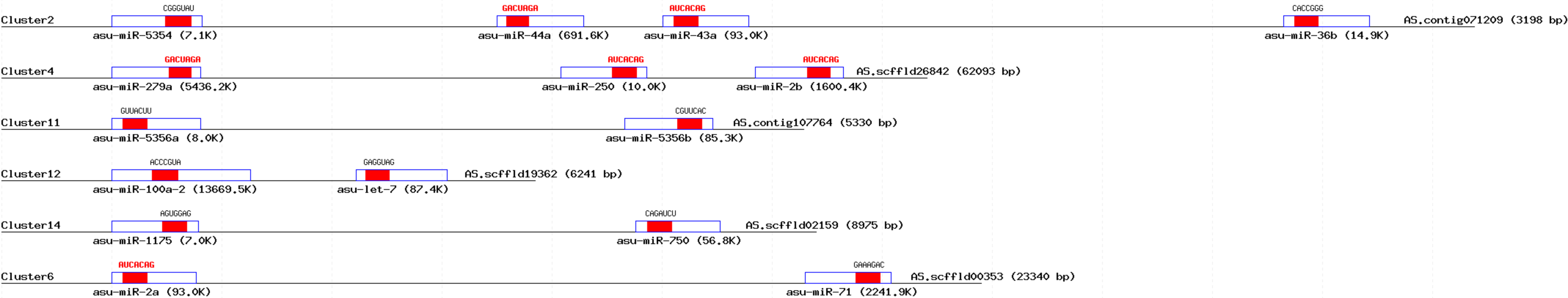
Ascaris polycistronic miRNAs

Wang et al.
Supplementary Figure 7

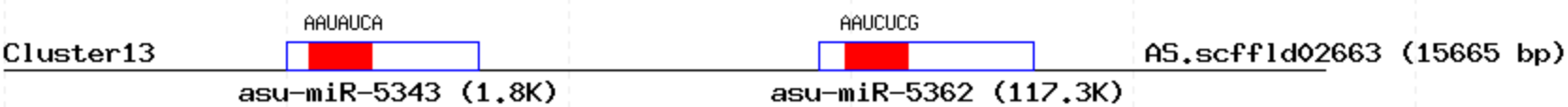
Testis



Embryo/Larvae



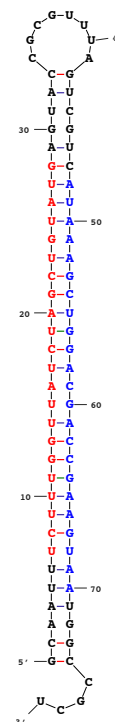
Larvae/Germline



0 bp 100 bp 200 bp 300 bp 400 bp 500 bp 600 bp 700 bp 800 bp 900 bp 1000 bp 1100 bp 1200 bp 1300 bp

B

C

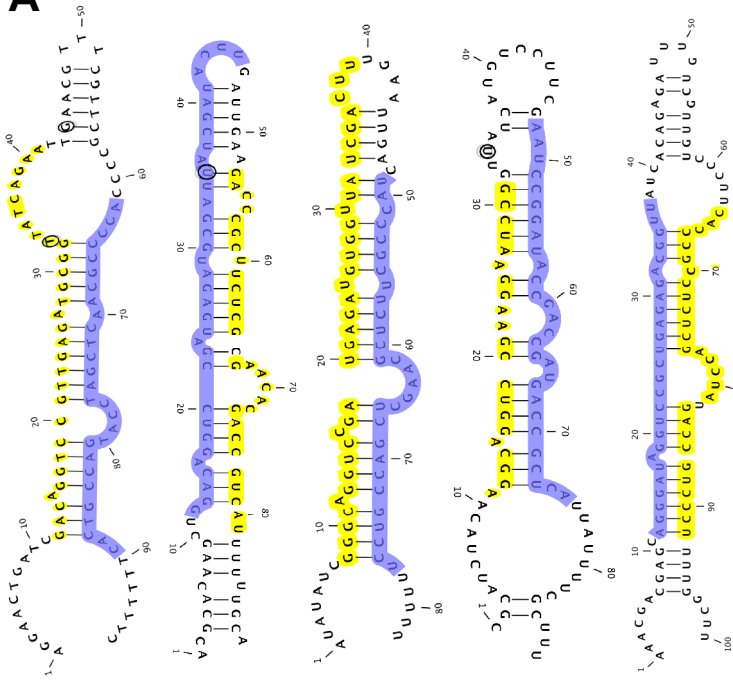


D

E



A



Up5a/5d/5e

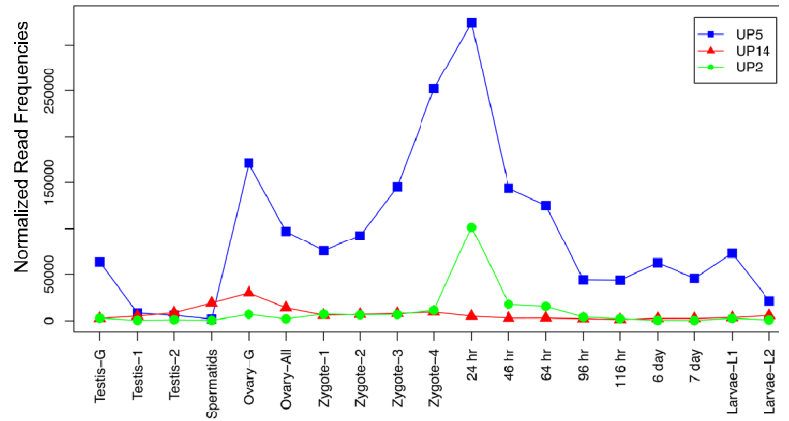
Up5b/5f

Up5c

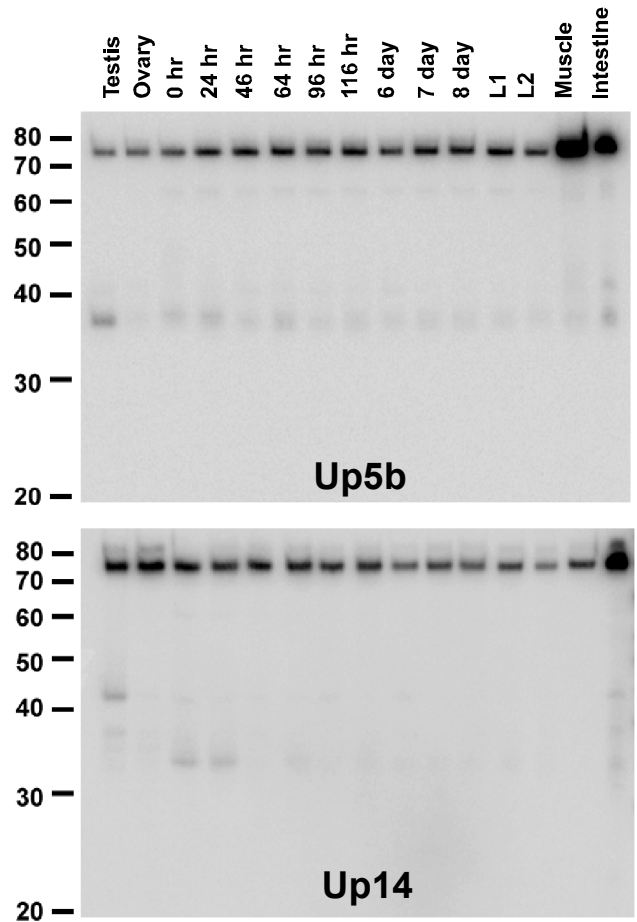
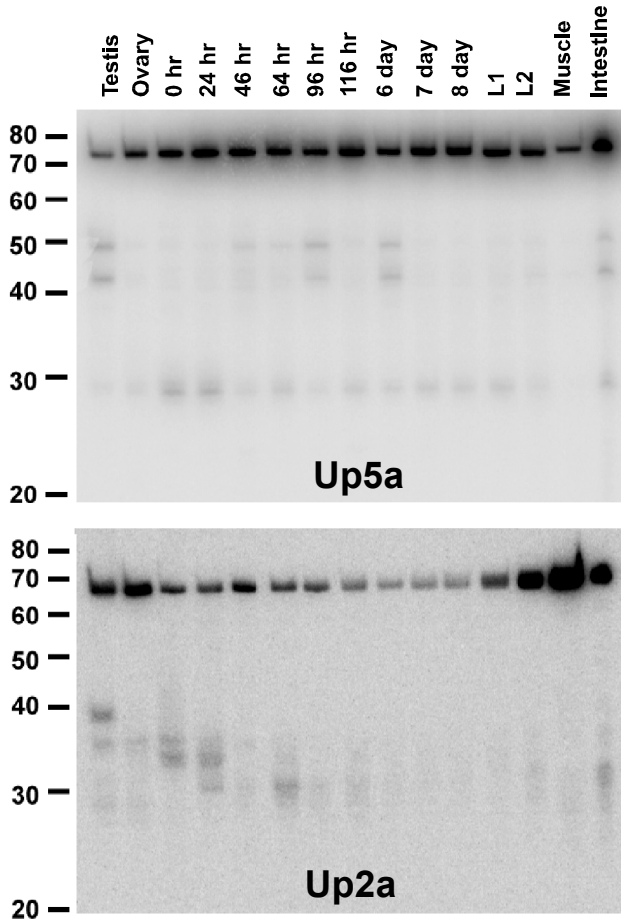
Up2a

Up14

B



C



#UP14

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Perfectly match

.....AGGGAUAGGUCCGCUGAGA.....	19	11046
.....AGGGAUAGGUCCGCUGAGAGA.....	21	14711
.....AGGGAUAGGUCCGCUGAGAGACG.....	23	121147
.....AGGGAUAGGUCCGCUGAGAGACGG.....	24	11201
.....AGGGAUAGGUCCGCUGAGAGACGGU.....	25	47403
.....AGGGAUAGGUCCGCUGAGAGACGGUU.....	26	1062100
.....AGGGAUAGGUCCGCUGAGAGACGGUUA.....	27	30354
.....AGGGAUAGGUCCGCUGAGAGACGGUUAUCACAG.....	33	12652
.....AGGGAUAGGUCCGCUGAGAGACGGUUAUCACAGA.....	34	21545
.....AGGGAUAGGUCCGCUGAGAGACGGUUAUCACAGAG.....	35	45875
.....AGGGAUAGGUCCGCUGAGAGACGGUUAUCACAGAGA.....	36	22111
.....AGGGAUAGGUCCGCUGAGAGACGGUUAUCACAGAGAU.....	37	34000
.....AGGGAUAGGUCCGCUGAGAGACGGUUAUCACAGAGAUUU.....	39	20894
.....GGGAUAGGUCCGCUGAGAGACGGUU.....	25	11337
.....UCACCCGCCUCUCGACCUAUGACCGUCCCU.....	30	19962
.....CACCCGCCUCUCGACCUAUGACCGUCCC.....	28	18477
.....CACCCGCCUCUCGACCUAUGACCGUCCCU.....	29	92321
.....CACCCGCCUCUCGACCUAUGACCGUCCCUU.....	30	16035
.....ACCCGCCUCUCGACCUAUGACCGUCCCU.....	28	15777

Perfectly antisense match

#UP2a

CGCAUCUACAAGGCAGGUCCGAAGGAAUCCGGUUAUCAUGUCCUUCGAAUCCGGAUACCGACCGAUGACCGCUCAUUUUUUCGCUUU

Perfectly match

.....AAGGCAGGUCCGAAGGAAUCCG.....	22	15702
.....AAGGCAGGUCCGAAGGAAUCCGGU.....	24	11346
.....AAGGCAGGUCCGAAGGAAUCCGGUU.....	25	16582
.....AAGGCAGGUCCGAAGGAAUCCGGUUAUCAUGUCCU.....	35	14035
.....AGGCAGGUCCGAAGGAAU.....	18	28173
.....AGGCAGGUCCGAAGGAAUC.....	19	28015
.....AGGCAGGUCCGAAGGAAUCC.....	20	30318
.....AGGCAGGUCCGAAGGAAUCCG.....	21	53303
.....AGGCAGGUCCGAAGGAAUCCGG.....	22	32933
.....AGGCAGGUCCGAAGGAAUCCGGU.....	23	37305
.....AGGCAGGUCCGAAGGAAUCCGGUU.....	24	41828
.....AGGCAGGUCCGAAGGAAUCCGGUUAUCAUGU.....	31	18454
.....AGGCAGGUCCGAAGGAAUCCGGUUAUCAUGUC.....	32	14562
.....AGGCAGGUCCGAAGGAAUCCGGUUAUCAUGUCC.....	33	11952
.....AGGCAGGUCCGAAGGAAUCCGGUUAUCAUGUCCU.....	34	18704

.....CUUCGAAUCCGGAUACCGACCGAUGACCGCUCA.....	33	13569
.....UUCGAAUCCGGAUACCGACCGAUGACCGCUCA.....	32	32405
.....UCGAAUCCGGAUACCGACCGAUGACCGCUCA.....	31	44109
.....CGAAUCCGGAUACCGACCGAUGACCGCUCA.....	30	49662
.....GAAUCCGGAUACCGACCGAUGACCGCUCA.....	29	59460
.....AAUCCGGAUACCGACCGAUGACCGCUCA.....	28	236230
.....AUCCGGAUACCGACCGAUGACCGCUCA.....	27	51842
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.....GAUACCGACCGAUGACCGCUCA.....	22	20577
.....AUACCGACCGAUGACCGCUCA.....	21	27896
.....UACCGACCGAUGACCGCUCA.....	20	15286
.....CCGACCGAUGACCGCUCA.....	18	56397

Perfectly antisense match

#UP2c

ACGCAUUUGAAAGGCAGGUCCGAAGGAAUCCGGUUAUCAUGUCCUUCGAAUCCGGAUACCGACCGAUGACCGCUCGUUAUUUUC

Perfectly match

.....AAGGCAGGUCCGAAGGAAUCCG.....	22	15702
.....AAGGCAGGUCCGAAGGAAUCCGGU.....	24	11346
.....AAGGCAGGUCCGAAGGAAUCCGGUU.....	25	16582
.....AAGGCAGGUCCGAAGGAAUCCGGUUAUCAUGUCCU.....	35	14035
.....AGGCAGGUCCGAAGGAAU.....	18	28173
.....AGGCAGGUCCGAAGGAAUC.....	19	28015
.....AGGCAGGUCCGAAGGAAUCC.....	20	30318
.....AGGCAGGUCCGAAGGAAUCCG.....	21	53303
.....AGGCAGGUCCGAAGGAAUCCGG.....	22	32933
.....AGGCAGGUCCGAAGGAAUCCGGU.....	23	37305
.....AGGCAGGUCCGAAGGAAUCCGGUU.....	24	41828
.....AGGCAGGUCCGAAGGAAUCCGGUUAUCAUGU.....	31	18454
.....AGGCAGGUCCGAAGGAAUCCGGUUAUCAUGUC.....	32	14562
.....AGGCAGGUCCGAAGGAAUCCGGUUAUCAUGUCC.....	33	11952
.....AGGCAGGUCCGAAGGAAUCCGGUUAUCAUGUCCU.....	34	18704
.....GAAUCCGGAUACCGACCGAUGACCGCUCG.....	29	13311
.....AAUCCGGAUACCGACCGAUGACCGCUCG.....	28	27731

Perfectly antisense match

#UP5a

AGGAACUGAUCGACAGGUCCGUUGAGAUGCGGUUAUCAGAAUUGAACGUUUCGUUCGCCCCACCCCGCAACUCGAUCCAUGACCGUCACUUUUUUC

Perfectly match

.....GACAGGUCCGUUGAGAUG.....	18	16428
.....GACAGGUCCGUUGAGAUGC.....	19	38785
.....GACAGGUCCGUUGAGAUGC.....	20	65296
.....GACAGGUCCGUUGAGAUGC.....	21	76568

.....GACAGGUCCGUUGAGAUGC	22	179915
.....GACAGGUCCGUUGAGAUGC	23	66307
.....GACAGGUCCGUUGAGAUGC	24	11140
.....GACAGGUCCGUUGAGAUGC	27	27767
.....GACAGGUCCGUUGAGAUGC	28	55837
.....GACAGGUCCGUUGAGAUGC	29	73856
.....GACAGGUCCGUUGAGAUGC	30	258715
.....GACAGGUCCGUUGAGAUGC	31	153185
.....GACAGGUCCGUUGAGAUGC	32	169246
.....GACAGGUCCGUUGAGAUGC	33	206728
.....GACAGGUCCGUUGAGAUGC	34	44979
.....GACAGGUCCGUUGAGAUGC	38	28927
.....GACAGGUCCGUUGAGAUGC	39	13896
.....GACAGGUCCGUUGAGAUGC	40	17056
.....GCCCCACCCCGCAACUCGAUCCAUGACCGUCAC	33	16253
.....CCCACCCCGCAACUCGAUCCAUGACCGUCAC	31	34199
.....CCACCCCGCAACUCGAUCCAUGACCGUCAC	30	61668
.....CACCCCGCAACUCGAUCCAUGACCGUCA	28	33875
.....CACCCCGCAACUCGAUCCAUGACCGUCAC	29	205012
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.....GCAACUCGAUCCAUGACCGUCAC	23	17511
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.....AACUCGAUCCAUGACCGUCAC	21	18488
.....ACUCGAUCCAUGACCGUCAC	20	17885
.....CUCGAUCCAUGACCGUCAC	19	10182
.....UCGAUCCAUGACCGUCAC	18	16452

Perfectly antisense match

#UP5b

ACGCACAAGCUGGACAGGUCCGAUGAGAUGC GAUUAUCGAUACUUGAUUGAAGACCCGCUUCUCGCGAACACGACCGUCAUUUUUUGCA

Perfectly match

.....GGACAGGUCCGAUGAGAUG	19	56359
.....GGACAGGUCCGAUGAGAUGC	20	38013
.....GGACAGGUCCGAUGAGAUGCG	21	112748
.....GGACAGGUCCGAUGAGAUGC GA	22	71613
.....GGACAGGUCCGAUGAGAUGC GAU	23	119205
.....GGACAGGUCCGAUGAGAUGC GAUU	24	217472
.....GGACAGGUCCGAUGAGAUGC GAUUA	25	36302

.....GGACAGGUCCGAUGAGAUGC GAUUAU.....	26	26452
.....GGACAGGUCCGAUGAGAUGC GAUUAUC.....	27	153851
.....GGACAGGUCCGAUGAGAUGC GAUUAUCG.....	28	35130
.....GGACAGGUCCGAUGAGAUGC GAUUAUCGA.....	29	30043
.....GGACAGGUCCGAUGAGAUGC GAUUAUCGAUA.....	31	120964
.....GGACAGGUCCGAUGAGAUGC GAUUAUCGAUACU.....	33	85529
.....GGACAGGUCCGAUGAGAUGC GAUUAUCGAUACUU.....	34	227465
.....GGACAGGUCCGAUGAGAUGC GAUUAUCGAUACUUG.....	35	58316
.....GGACAGGUCCGAUGAGAUGC GAUUAUCGAUACUUGA.....	36	12555
.....GGACAGGUCCGAUGAGAUGC GAUUAUCGAUACUUGAUUG.....	39	10133
.....GACAGGUCCGAUGAGAUGC G.....	20	12196
.....GACAGGUCCGAUGAGAUGC GA.....	21	10715
.....GACAGGUCCGAUGAGAUGC GAU.....	22	15672
.....GACAGGUCCGAUGAGAUGC GAUU.....	23	22395
.....GACAGGUCCGAUGAGAUGC GAUUAUC.....	26	13869
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.....GACAGGUCCGAUGAGAUGC GAUUAUCGAUACU.....	32	12435
.....GACAGGUCCGAUGAGAUGC GAUUAUCGAUACUU.....	33	29028
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.....GACCCGCUUCUCGCGAACACGACCGUCA.....	28	17298
.....GACCCGCUUCUCGCGAACACGACCGUCAU.....	29	28185

Perfectly antisense match

#UP5c

AUAUAUCGGGCAGGUCCGAUGAGAUGUGGUUAUCGACUUUGAAUUGACUACCCGCUUCUCGCAAGCUCGACCGUCCUUUUUU

Perfectly match

.....GGGCAGGUCCGAUGAGAUGUGGUUAUCGACUU.....	32	14932
.....GGGCAGGUCCGAUGAGAUGUGGUUAUCGACUUU.....	33	11356
.....ACUACCCGCUUCUCGCAAGCUCGACCGUCCU.....	31	25500
.....CUACCCGCUUCUCGCAAGCUCGACCGUCCU.....	30	36774
.....UACCCGCUUCUCGCAAGCUCGACCGUCCU.....	29	283606
.....ACCCGCUUCUCGCAAGCUCGACCGUCCU.....	28	42010

Perfectly antisense match

#UP5d

AGUGUUCGACAGGUCCGUUGAGAUGC GGUUAUCAGAAUUGAACGUUUCGUUCGCCCCACCCGCAACUCGAUCCAUGACCGUCCUUUUAGU

Perfectly match

.....GACAGGUCCGUUGAGAUG.....	18	16428
.....GACAGGUCCGUUGAGAUGC.....	19	38785
.....GACAGGUCCGUUGAGAUGC G.....	20	65296
.....GACAGGUCCGUUGAGAUGC GG.....	21	76568
.....GACAGGUCCGUUGAGAUGC GGU.....	22	179915
.....GACAGGUCCGUUGAGAUGC GGUU.....	23	66307
.....GACAGGUCCGUUGAGAUGC GGUUA.....	24	11140

.....GACAGGUCCGUUGAGAUGCGGUUAUCA.....	27	27767
.....GACAGGUCCGUUGAGAUGCGGUUAUCAG.....	28	55837
.....GACAGGUCCGUUGAGAUGCGGUUAUCAGA.....	29	73856
.....GACAGGUCCGUUGAGAUGCGGUUAUCAGAA.....	30	258715
.....GACAGGUCCGUUGAGAUGCGGUUAUCAGAAU.....	31	153185
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.....GACAGGUCCGUUGAGAUGCGGUUAUCAGAAUUGAACGU.....	38	28927
.....GACAGGUCCGUUGAGAUGCGGUUAUCAGAAUUGAACGUU.....	39	13896
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Perfectly antisense match

#UP5e

CAGCAGAAAGUACUCGACAGGUCCGUUGAGAUGCGGUUAUCAGAAUUGAACGUUUCGUUCGCCCCACCCCGCAUCUCGAUCCAUGACCGUCACUUUUUGUC

Perfectly match

.....GACAGGUCCGUUGAGAUG.....	18	16428
.....GACAGGUCCGUUGAGAUGC.....	19	38785
.....GACAGGUCCGUUGAGAUGCG.....	20	65296
.....GACAGGUCCGUUGAGAUGCGG.....	21	76568
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.....GACAGGUCCGUUGAGAUGCGGUU.....	23	66307
.....GACAGGUCCGUUGAGAUGCGGUUA.....	24	11140
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.....GACAGGUCCGUUGAGAUGCGGUUAUCAGAAUUGAACGU.....	38	28927
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.....CUCGAUCCAUGACCGUCAC.....	19	10182
.....UCGAUCCAUGACCGUCAC.....	18	16452

Perfectly antisense match

#UP5f

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Perfectly match

.....GGACAGGUCCGAUGAGAUG.....	19	56359
.....GGACAGGUCCGAUGAGAUGC.....	20	38013
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.....GGACAGGUCCGAUGAGAUGCGA.....	22	71613
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.....GGACAGGUCCGAUGAGAUGCGAUU.....	24	217472
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.....GGACAGGUCCGAUGAGAUGCGAUUAU.....	26	26452
.....GGACAGGUCCGAUGAGAUGCGAUUAUC.....	27	153851
.....GGACAGGUCCGAUGAGAUGCGAUUAUCG.....	28	35130
.....GGACAGGUCCGAUGAGAUGCGAUUAUCGA.....	29	30043
.....GGACAGGUCCGAUGAGAUGCGAUUAUCGAUA.....	31	120964
.....GGACAGGUCCGAUGAGAUGCGAUUAUCGAUACU.....	33	85529
.....GGACAGGUCCGAUGAGAUGCGAUUAUCGAUACUU.....	34	227465
.....GGACAGGUCCGAUGAGAUGCGAUUAUCGAUACUUG.....	35	58316
.....GGACAGGUCCGAUGAGAUGCGAUUAUCGAUACUUGA.....	36	12555
.....GGACAGGUCCGAUGAGAUGCGAUUAUCGAUACUUGAUUG.....	39	10133
.....GACAGGUCCGAUGAGAUGCG.....	20	12196
.....GACAGGUCCGAUGAGAUGCGA.....	21	10715
.....GACAGGUCCGAUGAGAUGCGAU.....	22	15672
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.....GACAGGUCCGAUGAGAUGCGAUUAUCGAUA.....	30	20110
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.....CGCAAACACGACCGUCCU....	18	17687

Perfectly antisense match