

Supplementary Table 3 The known and novel miRNAs detected from the seminal plasma, epididymal sperm, and ejaculated sperm libraries of pig

	miRNA_ID	pig			human		mous	bull	Pig miRNA sequence	Length	
		se min al pla sm a	epidi dyma l sper m	ejac ulate d sper m	se min al pla sm a	ejac ulate d sper m	e epidi dyma l sper m	ejac ulate d sper m			
1	known_ miRNA	ssc-let-7a	+	+	+	+	-	+	-	TGAGGTAGTAGGT TGTATAGTT	22
2	known_ miRNA	ssc-let-7c	+	+	+	+	+	+	+	TGAGGTAGTAGGT TGTATGGTT	22
3	known_ miRNA	ssc-let-7d-3p	+	+	-	-	-	+	+	CTATACGACCTGCT GCCTTCT	22
4	known_ miRNA	ssc-let-7d-5p	+	+	-	-	+	+	+	AGAGGTAGTAGGT TGCATAGTT	22
5	known_ miRNA	ssc-let-7e	+	+	+	+	-	+	+	TGAGGTAGGAGGT TGTATAGTT	22
6	known_ miRNA	ssc-let-7f	+	+	+	+	-	+	+	TGAGGTAGTAGAT TGTATAGTT	22
7	known_ miRNA	ssc-let-7g	+	+	+	+	-	+	+	TGAGGTAGTAGTT TGTACAGTT	22
8	known_ miRNA	ssc-let-7i	+	+	+	+	-	+	+	TGAGGTAGTAGTT TGTGCT	19
9	known_ miRNA	ssc-miR-1	+	+	+	+	+	+	-	TGGAATGTAAAGA AGTATGTA	21
10	known_ miRNA	ssc-miR-100	+	+	+	+	-	+	-	AACCCGTAGATCC GAACTTGTG	22
11	known_ miRNA	ssc-miR-101	+	+	+	+	-	-	+	TACAGTACTGTGAT AACTGAA	21
12	known_ miRNA	ssc-miR-103	+	+	+	+	-	+	+	AGCAGCATTGTAC AGGGCTATGA	23
13	known_ miRNA	ssc-miR-106a	+	+	+	+	-	+	-	AAAAGTGCTTACA GTGCAGGTAGC	24
14	known_ miRNA	ssc-miR-107	+	+	+	+	-	+	+	AGCAGCATTGTAC AGGGCTATCA	23
15	known_ miRNA	ssc-miR-10a-3p	+	+	-	-	+	-	-	CAAATTCGTATCTA GGGGAAT	21
16	known_ miRNA	ssc-miR-10a-5p	+	+	+	-	+	-	-	TACCCTGTAGATCC GAATTTGT	22
17	known_ miRNA	ssc-miR-10b	+	+	+	+	-	+	+	TACCCTGTAGAAC CGAATTTGT	22
18	known_ miRNA	ssc-miR-122	+	+	+	+	-	-	+	TGGAGTGTGACAA TGGTGTTTGT	23
19	known_ miRNA	ssc-miR-1249	-	+	-	-	-	-	+	ACGCCCTTCCCCC CCTTCTTCA	22
20	known_ miRNA	ssc-miR-124a	+	+	+	-	-	+	-	TAAGGCACGCGGT GAATGCCA	21
21	known_ miRNA	ssc-miR-125a	+	+	-	-	-	+	+	TCCCTGAGACCCT TTAACCTGTG	23
22	known_ miRNA	ssc-miR-125b	+	+	+	+	-	+	+	TCCCTGAGACCCT AACTTGTGA	22
23	known_ miRNA	ssc-miR-126-3p	+	+	+	-	+	+	+	TCGTACCGTGAGT	22

3	miRNA									AATAATGCG	
2	known_	ssc-miR-126-5p	+	+	+	-	+	-	+	CATTATTACTTTTG	21
4	miRNA									GTACGCG	
2	known_	ssc-miR-127	-	+	+	-	-	+	+	TCGGATCCGTCTG	22
5	miRNA									AGCTTGGCT	
2	known_	ssc-miR-1277	-	+	-	+	-	-	-	TACGTAGATATATA	22
6	miRNA									TGTATTTT	
2	known_	ssc-miR-128	+	+	+	+	+	-	+	TCACAGTGAACCG	21
7	miRNA									GTCTCTTT	
2	known_	ssc-miR-1285	-	+	-	+	-	-	-	CTGGGCAACATAG	24
8	miRNA									CGAGACCCCGT	
2	known_	ssc-miR-1296-5	-	+	+	-	-	-	-	TTAGGGCCCTGGC	22
9	miRNA	p								TCCATCTCC	
3	known_	ssc-miR-129a-3	+	+	+	-	-	-	-	AAGCCCTTACCCC	22
0	miRNA	p								AAAAAGCAT	
3	known_	ssc-miR-129a-5	+	+	+	-	-	-	-	CTTTTTGCGGTCT	21
1	miRNA	p>ssc-miR-129b								GGGCTTGC	
3	known_	ssc-miR-1306-3	-	+	-	-	+	-	-	ACGTGCGCTCTGG	21
2	miRNA	p								TGGTGATG	
3	known_	ssc-miR-1306-5	-	+	-	-	+	-	-	CCACCTCCCCTGC	22
3	miRNA	p								AAACGTCCA	
3	known_	ssc-miR-1307	-	+	-	+	-	-	-	ACTCGGCGTGGCG	22
4	miRNA									TCGGTCTGTG	
3	known_	ssc-miR-130a	+	+	+	+	-	+	+	CAGTGCAATGTTA	22
5	miRNA									AAAGGGCAT	
3	known_	ssc-miR-130b	+	+	-	+	-	+	-	CAGTGCAATGATG	22
6	miRNA									AAAGGGCAT	
3	known_	ssc-miR-132	+	+	+	+	-	+	+	TAACAGTCTACAG	22
7	miRNA									CCATGGTCG	
3	known_	ssc-miR-133a-3	+	+	+	-	-	-	-	TTGGTCCCCTTCA	21
8	miRNA	p								ACCAGCTG	
3	known_	ssc-miR-133a-5	+	+	+	-	-	-	-	AGCTGGTAAAATG	22
9	miRNA	p								GAACCAAAT	
4	known_	ssc-miR-133b	+	+	+	-	-	+	-	TTTGGTCCCCTTC	23
0	miRNA									AACCAGCTAT	
4	known_	ssc-miR-1343	+	+	-	-	-	-	-	CTCCTGGGGCCCCG	22
1	miRNA									CACTCTCGC	
4	known_	ssc-miR-135	+	+	+	-	-	-	-	TATGGCTTTTATT	23
2	miRNA									CCTATGTGA	
4	known_	ssc-miR-136	-	+	-	+	-	-	-	ACTCCATTTGTTTT	23
3	miRNA									GATGATGGA	
4	known_	ssc-miR-137	+	+	+	+	-	+	-	TTATTGCTTAAGAA	23
4	miRNA									TACGCGTAG	
4	known_	ssc-miR-138	+	+	+	+	-	+	-	AGCTGGTGTGTGTG	21
5	miRNA									AATCAGGC	
4	known_	ssc-miR-139-3p	-	+	-	+	+	-	-	TGGAGACGCGGCC	23
6	miRNA									CTGTTGGAGT	
4	known_	ssc-miR-139-5p	-	+	+	+	-	-	-	TCTACAGTGCACG	22
7	miRNA									TGTCTCCAG	
4	known_	ssc-miR-140-3p	+	+	+	+	+	+	-	TACCACAGGGTAG	23
8	miRNA									AACCACGGAC	
4	known_	ssc-miR-140-5p	-	+	+	-	+	-	-	AGTGGTTTTACCCT	21
9	miRNA									ATGGTAG	
5	known_	ssc-miR-142-3p	+	+	+	+	+	-	+	TGTAGTGTTCCTA	22
0	miRNA									CTTTATGG	
5	known_	ssc-miR-142-5p	+	+	+	+	+	+	+	CATAAAGTAGAAA	21
1	miRNA									GCACTACT	

5	known_	ssc-miR-143-3p	+	+	+	-	+	-	-	TGAGATGAAGCAC	21
2	miRNA									TGTAGCTC	
5	known_	ssc-miR-144	+	+	-	-	-	-	+	TACAGTATAGATGA	19
3	miRNA									TGTAC	
5	known_	ssc-miR-145-3p	-	+	+	-	-	-	+	GGATTCTGGAAA	22
4	miRNA									TACTGTTCT	
5	known_	ssc-miR-145-5p	+	+	+	-	-	-	-	GTCCAGTTTTCCC	24
5	miRNA									AGGAATCCCTT	
5	known_	ssc-miR-1468	-	+	-	+	-	-	+	CTCCGTTTGCCTG	22
6	miRNA									TTTTGCTGA	
5	known_	ssc-miR-146a-5	+	+	+	-	+	-	-	TGAGAACTGAATT	22
7	miRNA	p								CCATGGGTT	
5	known_	ssc-miR-146b	+	+	+	-	-	-	+	TGAGAACTGAATT	21
8	miRNA									CCATAGGC	
5	known_	ssc-miR-148a-3	+	+	+	-	+	-	-	TCAGTGCACTACA	22
9	miRNA	p								GAACTTTGT	
6	known_	ssc-miR-148a-5	+	+	-	-	+	-	-	AAAGTTCTGAGAC	22
0	miRNA	p								ACTCCGACT	
6	known_	ssc-miR-148b-3	+	+	+	-	+	-	-	TCAGTGCATCACA	22
1	miRNA	p								GAACTTTGT	
6	known_	ssc-miR-148b-5	+	+	-	-	+	-	+	GAAGTTCTGTTATA	23
2	miRNA	p								CACTCAGGC	
6	known_	ssc-miR-149	-	+	-	+	-	+	-	TCTGGCTCCGTGT	23
3	miRNA									CTTACTCCC	
6	known_	ssc-miR-150	-	+	+	+	-	+	+	TCTCCCAACCCTT	22
4	miRNA									GTACCAGTG	
6	known_	ssc-miR-151-3p	+	+	+	+	-	-	+	CTAGACTGAAGCT	22
5	miRNA									CCTTGAGGA	
6	known_	ssc-miR-151-5p	+	+	+	+	-	-	+	TCGAGGAGCTCAC	21
6	miRNA									AGTCTAGT	
6	known_	ssc-miR-152	+	+	-	+	+	+	+	TCAGTGCATGACA	21
7	miRNA									GAACCTGG	
6	known_	ssc-miR-153	+	+	+	+	-	-	+	TTGCATAGTCACA	20
8	miRNA									AAAGTGA	
6	known_	ssc-miR-155-5p	-	+	-	-	+	-	-	TTAATGCTAATTGT	22
9	miRNA									GATAGGGG	
7	known_	ssc-miR-15a	+	+	+	+	-	+	+	TAGCAGCACATAA	21
0	miRNA									TGGTTTGT	
7	known_	ssc-miR-15b	+	+	+	+	-	+	+	TAGCAGCACATCA	22
1	miRNA									TGGTTTACA	
7	known_	ssc-miR-16	+	+	+	+	-	+	-	TAGCAGCACGTAA	22
2	miRNA									ATATTGGCG	
7	known_	ssc-miR-17-3p	-	+	+	-	-	+	-	ACTGCAGTGAAGG	22
3	miRNA									CACTTGTAG	
7	known_	ssc-miR-17-5p	+	+	+	-	+	+	+	CAAAGTGCTTACA	23
4	miRNA									GTGCAGGTAG	
7	known_	ssc-miR-181a	+	+	+	+	-	+	+	AACATTCAACGCT	24
5	miRNA									GTCGGTGAGTT	
7	known_	ssc-miR-181b	+	+	+	+	-	+	+	AACATTCATTGCT	24
6	miRNA									GTCGGTGGGTT	
7	known_	ssc-miR-181c	+	+	+	+	-	+	-	AACATTCAACCTG	22
7	miRNA									TCGGTGAGT	
7	known_	ssc-miR-181d-5	-	+	+	-	-	-	-	AACATTCATTGTTG	24
8	miRNA	p								TCGGTGGGTT	
7	known_	ssc-miR-182	+	+	+	+	-	+	+	TTGGCAATGGTA	24
9	miRNA									GAACTCACACT	
8	known_	ssc-miR-183	+	+	+	+	-	+	+	TATGGCACTGGTA	23
0	miRNA									GAATTCCTG	

8	known_	ssc-miR-1839-5	-	+	-	-	-	-	-	AAGGTAGATAGAA	22
1	miRNA	p								CAGGTCTTG	
8	known_	ssc-miR-184	+	+	+	+	+	+	+	TGGACGGAGAACT	22
2	miRNA									GATAAGGGT	
8	known_	ssc-miR-185	-	+	-	+	-	+	+	TGGAGAGAAAAGG	22
3	miRNA									CAGTTCCTGA	
8	known_	ssc-miR-186	+	+	+	+	-	-	+	CAAAGAATTCTCC	23
4	miRNA									TTTTGGGCTT	
8	known_	ssc-miR-187	+	+	+	+	-	+	-	TCGTGTCTTGTGTT	22
5	miRNA									GCAGCCGG	
8	known_	ssc-miR-18a	+	+	+	+	-	-	+	TAAGGTGCATCTA	22
6	miRNA									GTGCAGATA	
8	known_	ssc-miR-18b	+	+	+	+	-	-	+	TAAGGTGCATCTA	23
7	miRNA									GTGCAGTTAG	
8	known_	ssc-miR-190a	+	+	+	-	+	-	-	TGATATGTTTGATA	21
8	miRNA									TATTAGG	
8	known_	ssc-miR-190b	-	+	+	+	+	-	+	TGATATGTTTGATA	22
9	miRNA									TTGGGTTG	
9	known_	ssc-miR-191	+	+	+	+	-	+	+	CAACGGAATCCCA	23
0	miRNA									AAAGCAGCTG	
9	known_	ssc-miR-192	+	+	+	+	-	-	+	CTGACCTATGAATT	21
1	miRNA									GACAGCC	
9	known_	ssc-miR-193a-3	-	+	-	+	-	-	-	AACTGGCCTACAA	22
2	miRNA	p								AGTCCCAGT	
9	known_	ssc-miR-193a-5	-	+	+	+	+	-	+	TGGGTCTTTGCGG	22
3	miRNA	p								GCGAGATGA	
9	known_	ssc-miR-194a	-	+	+	-	-	-	-	TGTAACAGCAACT	21
4	miRNA									CCATGTGG	
9	known_	ssc-miR-195	-	+	-	+	-	+	+	TAGCAGCACAGAA	21
5	miRNA									ATATTGGC	
9	known_	ssc-miR-196a	+	+	+	+	-	+	+	TAGGTAGTTTCATG	22
6	miRNA									TTGTTGGG	
9	known_	ssc-miR-196b-5	-	+	-	-	+	-	-	TAGGTAGTTTCCT	22
7	miRNA	p								GTTGTTGGG	
9	known_	ssc-miR-199a-3	+	+	+	+	+	+	+	ACAGTAGTCTGCA	22
8	miRNA	p								CATTGGTTA	
9	known_	ssc-miR-199a-5	+	+	+	-	+	+	+	CCCAGTGTTCAGA	23
9	miRNA	p								CTACCTGTTC	
1	known_	ssc-miR-199b-3	+	+	+	+	+	-	-	TACAGTAGTCTGC	22
0	miRNA	p								ACATTGGTT	
0											
1	known_	ssc-miR-199b-5	-	+	-	-	-	-	-	CCCAGTGTTTAGA	22
0	miRNA	p								CTATCTGTT	
1											
1	known_	ssc-miR-19a	+	+	+	-	-	+	+	TGTGCAAATCTAT	23
0	miRNA									GCAAAACTGA	
2											
1	known_	ssc-miR-19b	+	+	+	+	-	+	+	TGTGCAAATCCAT	23
0	miRNA									GCAAAACTGA	
3											
1	known_	ssc-miR-202-5p	-	+	-	-	+	-	-	TTCCTATGCATATA	21
0	miRNA									CTTCTTT	
4											
1	known_	ssc-miR-204	+	+	+	+	-	+	-	TTCCTTTGTCATC	22
0	miRNA									CTATGCCT	
5											
1	known_	ssc-miR-205	+	+	+	+	-	+	+	TCCTTCATTCCACC	22
0	miRNA									GGAGTCTG	

6											
1	known_	ssc-miR-206	+	+	+	+	-	+	-	TGGAATGTAAGGA	22
0	miRNA									AGTGTGTGA	
7											
1	known_	ssc-miR-208b	+	+	-	-	-	-	-	ATAAGACGAACAA	22
0	miRNA									AAGGTTTGT	
8											
1	known_	ssc-miR-20a	+	+	+	+	-	-	+	TAAAGTGCTTATA	22
0	miRNA									GTGCAGGTA	
9											
1	known_	ssc-miR-20b	+	+	-	+	-	-	-	CAAAGTGCTCACA	23
1	miRNA									GTGCAGGTAG	
0											
1	known_	ssc-miR-21	+	+	+	+	-	+	+	TAGCTTATCAGACT	22
1	miRNA									GATGTTGA	
1											
1	known_	ssc-miR-210	+	+	+	+	-	+	-	CTGTGCGTGTGAC	22
1	miRNA									AGCGGCTGA	
2											
1	known_	ssc-miR-212	+	+	+	+	-	+	+	ACCTTGCTCTAG	23
1	miRNA									ACTGCTTACT	
3											
1	known_	ssc-miR-214	+	+	-	-	-	+	+	ACAGCAGGCACA	21
1	miRNA									GACAGGCAG	
4											
1	known_	ssc-miR-215	-	+	+	+	+	+	+	ATGACCTATGAATT	21
1	miRNA									GACAGAC	
5											
1	known_	ssc-miR-216	+	+	+	-	-	-	-	TAATCTCAGCTGG	23
1	miRNA									CAACTGTGAG	
6											
1	known_	ssc-miR-217	+	+	+	+	+	-	-	TACTGCATCAGGA	24
1	miRNA									ACTGATTGGAT	
7											
1	known_	ssc-miR-218>ss	+	+	+	-	-	-	-	TTGTGCTTGATCTA	21
1	miRNA	c-miR-218-5p								ACCATGT	
8											
1	known_	ssc-miR-218b	+	+	+	-	-	-	-	TTGTGCTTGATCTA	22
1	miRNA									ACCATGTG	
9											
1	known_	ssc-miR-22-3p	+	+	+	-	+	-	+	AAGCTGCCAGTTG	22
2	miRNA									AAGAACTGT	
0											
1	known_	ssc-miR-22-5p	-	+	+	-	-	-	-	AGTTCTTCAGTGG	22
2	miRNA									CAAGCTTTA	
1											
1	known_	ssc-miR-221-3p	+	+	+	-	+	-	+	AGCTACATTGTCT	22
2	miRNA									GCTGGGTTT	
2											
1	known_	ssc-miR-221-5p	+	+	+	-	-	-	+	ACCTGGCATACAA	26
2	miRNA									TGTAGATTTCTGT	
3											
1	known_	ssc-miR-222	+	+	+	+	-	+	+	AGCTACATCTGGC	24
2	miRNA									TACTGGGTCTC	
4											
1	known_	ssc-miR-224	-	-	+	+	-	+	+	CAAGTCACTAGTG	23
2	miRNA									GTCCGTTTA	

5											
1	known_	ssc-miR-2320-3	-	+	-	-	-	-	+	CGATGATGGTCCC	21
2	miRNA	p								TGTGTTTG	
6											
1	known_	ssc-miR-2320-5	-	+	-	-	-	-	-	TGGCACAGGGTCC	22
2	miRNA	p								AGCTGTCGG	
7											
1	known_	ssc-miR-23a	+	+	+	+	-	+	+	ATCACATTGCCAG	21
2	miRNA									GGATTTC	
8											
1	known_	ssc-miR-23b	+	+	+	+	-	+	-	ATCACATTGCCAG	22
2	miRNA									GGATTACCA	
9											
1	known_	ssc-miR-24-2-5	+	+	+	-	-	-	-	GTGCCTACTGAGC	23
3	miRNA	p								TGATATCAGT	
0											
1	known_	ssc-miR-24-3p	+	+	+	-	+	-	+	TGGCTCAGTTCAG	22
3	miRNA									CAGGAACAG	
1											
1	known_	ssc-miR-2411	-	+	-	-	-	-	-	TGGAGTGA CTGTC	22
3	miRNA									AGATGCAGC	
2											
1	known_	ssc-miR-2483	-	+	-	-	-	-	-	AAACATCTGGTTG	22
3	miRNA									GTTGAGAGA	
3											
1	known_	ssc-miR-26a	+	+	+	+	-	+	+	TCAAGTAATCCA	22
3	miRNA									GGATAGGCT	
4											
1	known_	ssc-miR-27a	+	+	+	+	-	+	-	TTCACAGTGGCTA	21
3	miRNA									AGTCCGC	
5											
1	known_	ssc-miR-27b-3p	+	+	+	-	+	-	-	TTCACAGTGGCTA	21
3	miRNA									AGTCTGC	
6											
1	known_	ssc-miR-27b-5p	+	+	+	-	-	-	-	AGAGCTTAGCTGA	23
3	miRNA									TTGGTGAACA	
7											
1	known_	ssc-miR-28-3p	+	+	+	+	+	-	-	CACTAGATTGTGA	22
3	miRNA									GCTCCTGGA	
8											
1	known_	ssc-miR-28-5p	+	+	-	+	+	-	-	AAGGAGCTCACAG	22
3	miRNA									TCTATTGAG	
9											
1	known_	ssc-miR-296-3p	+	+	-	+	-	-	-	AGGGTTGGGCGGA	21
4	miRNA									GGCTTTCC	
0											
1	known_	ssc-miR-296-5p	-	+	-	-	+	-	-	GAGGGCCCCCCCC	21
4	miRNA									AATCCTGT	
1											
1	known_	ssc-miR-29a	+	+	-	+	-	+	+	CTAGCACCATCTG	23
4	miRNA									AAATCGGTTA	
2											
1	known_	ssc-miR-29b	+	+	+	+	-	+	+	TAGCACCATTGGA	23
4	miRNA									AATCAGTGTT	
3											
1	known_	ssc-miR-29c	+	+	+	+	-	+	+	TAGCACCATTGGA	22
4	miRNA									AATCGGTTA	

4												
1	known_	ssc-miR-30a-3p	+	+	+	-	+	+	+	CTTTCAGTCGGAT	22	
4	miRNA									GTTTGCAGC		
5												
1	known_	ssc-miR-30a-5p	+	+	+	-	+	+	+	TGTA AACATCCTC	22	
4	miRNA									GA CTGGAAG		
6												
1	known_	ssc-miR-30b-3p	-	+	-	-	-	-	-	CTGGGAGGTGGAT	21	
4	miRNA									GTTTACTT		
7												
1	known_	ssc-miR-30b-5p	+	+	+	-	+	-	+	TGTA AACATCCTA	22	
4	miRNA									CA CTCA GCT		
8												
1	known_	ssc-miR-30c-1-	-	+	-	-	-	-	-	CTGGGAGAGGGTT	20	
4	miRNA	3p								GTTTACT		
9												
1	known_	ssc-miR-30c-3p	-	+	+	-	-	-	-	CTGGGAGAAGGCT	22	
5	miRNA									GTTTACTCT		
0												
1	known_	ssc-miR-30c-5p	+	+	+	-	+	-	-	TGTA AACATCCTA	23	
5	miRNA									CA CTCTCA GC		
1												
1	known_	ssc-miR-30d	+	+	+	+	-	+	+	TGTA AACATCCCC	24	
5	miRNA									GA CTGGAAGCT		
2												
1	known_	ssc-miR-30e-3p	+	+	+	-	+	+	+	CTTTCAGTCGGAT	22	
5	miRNA									GTTTACAGC		
3												
1	known_	ssc-miR-30e-5p	+	+	+	-	+	-	+	TGTA AACATCCTT	24	
5	miRNA									GA CTGGAAGCT		
4												
1	known_	ssc-miR-31	+	+	-	+	-	+	-	AGGCAAGATGCTG	22	
5	miRNA									GCATAGCTG		
5												
1	known_	ssc-miR-32	+	+	+	+	-	-	+	TATTGCACATTACT	21	
5	miRNA									AAGTTGC		
6												
1	known_	ssc-miR-320	+	+	+	-	-	+	+	AAAAGCTGGGTTG	23	
5	miRNA									AGAGGGCGAA		
7												
1	known_	ssc-miR-323	-	+	-	-	-	-	-	GCACATTACACGG	22	
5	miRNA									TCGACCTCT		
8												
1	known_	ssc-miR-324	-	+	-	-	-	-	-	CGCATCCCCTAGG	23	
5	miRNA									GCATTGGTGT		
9												
1	known_	ssc-miR-325	-	+	-	-	-	+	-	CCTAGTAGGTGTT	23	
6	miRNA									CAGTAAGTGT		
0												
1	known_	ssc-miR-328	+	+	-	+	+	+	+	CTGGCCCTCTCTG	22	
6	miRNA									CCCTTCCGT		
1												
1	known_	ssc-miR-331-3p	-	+	-	+	-	-	-	GCCCCTGGGCCTA	21	
6	miRNA									TCCTAGAA		
2												
1	known_	ssc-miR-331-5p	-	+	-	+	-	-	+	TCTAGGTATGGTCC	21	
6	miRNA									CAGGGAT		

3											
1	known_	ssc-miR-335	-	+	-	+	-	-	+	TCAAGAGCAATAA	22
6	miRNA									CGAAAAATG	
4											
1	known_	ssc-miR-338	+	+	+	-	-	-	-	TCCAGCATCAGTG	22
6	miRNA									ATTTTGTG	
5											
1	known_	ssc-miR-339	+	+	-	-	-	-	+	TCCCTGTCCTCCA	21
6	miRNA									GGAGCTCA	
6											
1	known_	ssc-miR-339-3p	-	+	-	+	+	-	-	AGCTCCTCGAGGC	21
6	miRNA									CAGAGCCC	
7											
1	known_	ssc-miR-339-5p	+	+	-	+	-	-	-	TCCCTGTCCTCCA	22
6	miRNA									GGAGCTCAC	
8											
1	known_	ssc-miR-340	+	+	+	+	-	-	+	TTATAAAGCAATG	22
6	miRNA									AGACTGATT	
9											
1	known_	ssc-miR-342	+	+	+	-	-	+	+	TCTCACACAGAAA	25
7	miRNA									TCGCACCCGTCA	
0											
1	known_	ssc-miR-345-3p	-	+	-	-	-	-	-	CCCTGAACTAGGG	21
7	miRNA									GTCTGGAG	
1											
1	known_	ssc-miR-345-5p	-	+	-	-	-	-	+	GCTGACTCCTAGT	20
7	miRNA									CCAGTGC	
2											
1	known_	ssc-miR-34a	+	+	+	+	-	+	-	TGGCAGTGTCTTA	22
7	miRNA									GCTGGTTGT	
3											
1	known_	ssc-miR-34c	+	+	+	-	-	+	+	AGGCAGTGTAGTT	23
7	miRNA									AGCTGATTGC	
4											
1	known_	ssc-miR-361-3p	+	+	-	+	-	-	+	CCCCCAGGTGTGA	24
7	miRNA									TTCTGATTGTC	
5											
1	known_	ssc-miR-361-5p	-	+	-	+	+	-	-	TTATCAGAATCTCC	22
7	miRNA									AGGGGTAC	
6											
1	known_	ssc-miR-3613	-	+	-	-	-	-	-	TGTTGTACTTTTTT	20
7	miRNA									TTTTGT	
7											
1	known_	ssc-miR-362	-	+	-	-	-	-	-	AATCCTTGGAACC	25
7	miRNA									TAGGTGTGAGTG	
8											
1	known_	ssc-miR-363	+	+	+	+	-	-	+	AATTGCACGGTAT	23
7	miRNA									CCATCTGTAA	
9											
1	known_	ssc-miR-365-3p	+	+	+	-	-	-	+	TAATGCCCTAAA	22
8	miRNA									AATCCTTAT	
0											
1	known_	ssc-miR-369	-	+	-	-	-	-	-	AATAATACATGGTT	21
8	miRNA									GATCTTT	
1											
1	known_	ssc-miR-374a-3	+	+	-	-	+	-	+	CTTATCAGGTTGTA	22
8	miRNA	p								TTGTAATT	



2												
1	known_	ssc-miR-374a-5	+	+	-	-	+	-	+	TTATAATACAACCT	22	
8	miRNA	p								GATAAGTG		
3												
1	known_	ssc-miR-374b-3	-	+	-	-	-	-	-	CTTATCAGGTTGTA	22	
8	miRNA	p								TTATCATT		
4												
1	known_	ssc-miR-374b-5	-	+	-	-	-	-	-	ATATAATACAACCT	22	
8	miRNA	p								GCTAAGTG		
5												
1	known_	ssc-miR-378	+	+	-	+	-	+	+	ACTGGACTTGGAG	22	
8	miRNA									TCAGAAGGC		
6												
1	known_	ssc-miR-378b-3	-	+	-	-	-	-	-	ACTGGACTTGGAG	21	
8	miRNA	p								TCAGAAGT		
7												
1	known_	ssc-miR-382	-	+	-	+	-	+	-	AAGTTGTTCGTGG	21	
8	miRNA									TGGATTTCG		
8												
1	known_	ssc-miR-383	-	+	+	+	+	+	-	CCACAGCACTGCC	21	
8	miRNA									TGGTCAGA		
9												
1	known_	ssc-miR-421-3p	+	+	-	-	-	-	-	ATCAACAGACATT	23	
9	miRNA									AATTGGGCGC		
0												
1	known_	ssc-miR-421-5p	-	+	-	-	-	-	-	CCTCATTAAATGTT	24	
9	miRNA									TGTTGAATGA		
1												
1	known_	ssc-miR-423-3p	+	+	-	+	+	-	+	AGCTCGGTCTGAG	23	
9	miRNA									GCCCCCAGT		
2												
1	known_	ssc-miR-423-5p	+	+	-	+	+	-	+	TGAGGGGCAGAG	23	
9	miRNA									AGCGAGACTTT		
3												
1	known_	ssc-miR-424-3p	-	+	-	-	-	-	-	CAAAACGTGAGGC	21	
9	miRNA									GCTGCTAT		
4												
1	known_	ssc-miR-424-5p	-	+	-	-	+	-	-	CAGCAGCAATTCA	22	
9	miRNA									TGTTTTGAA		
5												
1	known_	ssc-miR-425-3p	-	+	-	-	+	-	+	ATCGGGAATGTCG	22	
9	miRNA									TGTCGCCC		
6												
1	known_	ssc-miR-425-5p	+	+	+	-	+	-	+	AATGACACGATCA	23	
9	miRNA									CTCCCGTTGA		
7												
1	known_	ssc-miR-429	+	+	+	+	+	+	+	TAATACTGTCTGGT	22	
9	miRNA									AATGCCGT		
8												
1	known_	ssc-miR-4332	-	+	-	-	-	-	-	CACGGCCGCCGCC	20	
9	miRNA									GGGCGCC		
9												
2	known_	ssc-miR-4334-3	+	+	-	-	-	-	-	TCCCTGTCCTCCA	20	
0	miRNA	p								GGAGCTC		
0												
2	known_	ssc-miR-450b-5	-	+	-	+	-	-	-	TTTTGCAATATGTT	22	
0	miRNA	p								CCTGAATA		

1											
2	known_	ssc-miR-450c-3	-	+	-	-	-	-	-	ATTGGGAACATTT	22
0	miRNA	p								TGCATTCGT	
2	known_	ssc-miR-450c-5	-	+	-	-	-	-	-	TTTTGCGATGTGTT	22
0	miRNA	p								CCTAATAC	
3											
2	known_	ssc-miR-451	+	+	+	+	-	+	+	AAACCGTTACCAT	22
0	miRNA									TACTGAGTT	
4											
2	known_	ssc-miR-455-3p	-	+	+	+	-	-	-	GCAGTCCATGGGC	21
0	miRNA									ATATACAC	
5											
2	known_	ssc-miR-455-5p	-	+	-	+	+	-	+	TATGTGCCTTTGG	22
0	miRNA									ACTACATCG	
6											
2	known_	ssc-miR-486	+	+	+	-	-	+	+	TCCTGTACTGAGC	22
0	miRNA									TGCCCCGAG	
7											
2	known_	ssc-miR-489	-	+	-	-	-	-	-	AGTGACATCACAT	22
0	miRNA									ATACGGCGG	
8											
2	known_	ssc-miR-490>ssc	+	+	+	-	-	-	-	CAACCTGGAGGAC	22
0	miRNA	c-miR-490-3p								TCCATGCTG	
9											
2	known_	ssc-miR-491	-	+	-	-	-	-	-	AGTGGGGAACCTT	22
1	miRNA									TCCATGAGG	
0											
2	known_	ssc-miR-497	-	+	-	+	-	-	+	CAGCAGCACACTG	21
1	miRNA									TGGTTTGT	
1											
2	known_	ssc-miR-499-5p	+	+	+	+	-	-	-	TTAAGACTTGCAG	21
1	miRNA									TGATGTTT	
2											
2	known_	ssc-miR-504	-	+	+	+	-	-	+	AGACCCTGGTCTG	23
1	miRNA									CACTCTATCT	
3											
2	known_	ssc-miR-505	-	+	-	+	-	-	-	TCAACACTTGCTG	22
1	miRNA									GTTTCTCT	
4											
2	known_	ssc-miR-532-3p	+	+	+	+	-	-	-	CCTCCACACCCA	22
1	miRNA									AGGCTTGCA	
5											
2	known_	ssc-miR-532-5p	+	+	-	+	+	-	-	CATGCCTTGAGTG	22
1	miRNA									TAGGACCGT	
6											
2	known_	ssc-miR-545-3p	-	+	-	-	-	-	-	ATCAACAAACATT	22
1	miRNA									TATTGTGTG	
7											
2	known_	ssc-miR-545-5p	-	+	-	-	-	-	-	TCAGTAAATGTTTA	21
1	miRNA									TTGGATG	
8											
2	known_	ssc-miR-574	+	+	-	-	-	-	-	CACGCTCATGCAC	22
1	miRNA									ACACCCACA	
9											
2	known_	ssc-miR-582	+	+	-	-	-	-	-	TAACCGTTGAAC	22
2	miRNA									AACTGAACC	

0											
2	known_	ssc-miR-628	+	+	-	-	-	-	-	ATGCTGACATATTT	22
2	miRNA									ACTAGAGG	
1											
2	known_	ssc-miR-652	-	+	-	+	-	-	-	ACAACCCTAGGAG	26
2	miRNA									AGGGTGCCATTCA	
2											
2	known_	ssc-miR-664-3p	-	+	-	-	-	-	-	TATTCATTTATCTC	24
2	miRNA									CCAGCCTACA	
3											
2	known_	ssc-miR-664-5p	-	+	-	-	-	-	-	CAGGCTAGGAGAA	23
2	miRNA									GTGATTGGAT	
4											
2	known_	ssc-miR-671-3p	-	+	-	+	-	-	-	TCCGGTTCTCAGG	21
2	miRNA									GCTCCACC	
5											
2	known_	ssc-miR-676-3p	-	+	-	-	-	-	-	CCGTCCTAAGGTT	21
2	miRNA									GTTGAGTT	
6											
2	known_	ssc-miR-676-5p	-	+	-	-	-	-	-	CTCTTCAATCTCA	22
2	miRNA									GGACTCGCA	
7											
2	known_	ssc-miR-6782-3	-	+	-	-	-	-	-	TGACCTCTGGTCT	22
2	miRNA	p								CCCGCCCTG	
8											
2	known_	ssc-miR-7	+	+	+	+	-	+	+	TGGAAGACTAGTG	24
2	miRNA									ATTTTGTGT	
9											
2	known_	ssc-miR-708-3p	-	+	-	-	-	-	+	CAACTAGACTGTG	23
3	miRNA									AGCTTCTAGA	
0											
2	known_	ssc-miR-708-5p	-	+	-	-	-	-	-	AAGGAGCTTACAA	23
3	miRNA									TCTAGCTGGG	
1											
2	known_	ssc-miR-7134-3	+	+	-	-	-	-	-	ATGCGGAACCTGC	21
3	miRNA	p								GGATACGG	
2											
2	known_	ssc-miR-7134-5	-	+	-	-	-	-	-	ATGTCCGCGGGTT	21
3	miRNA	p								CCCTATCC	
3											
2	known_	ssc-miR-7135-3	-	+	-	-	-	-	-	ATCTGTCTGTGTCT	22
3	miRNA	p								CTGAGCAG	
4											
2	known_	ssc-miR-7136-3	-	+	-	-	-	-	-	TCTCAGTGTTTGA	22
3	miRNA	p								ACCAGAAGC	
5											
2	known_	ssc-miR-7136-5	-	+	-	-	-	-	-	TCTGGTCCAGACA	22
3	miRNA	p								CTGTGGAGC	
6											
2	known_	ssc-miR-7137-5	-	+	-	-	-	-	-	CGGGGGAACCTCC	21
3	miRNA	p								AGACCAGC	
7											
2	known_	ssc-miR-7139-3	-	+	-	-	-	-	-	TAGGGCACAGGAT	22
3	miRNA	p								GGGATGAGG	
8											
2	known_	ssc-miR-7139-5	-	+	-	-	-	-	-	CCATTCCTTCGTCT	23
3	miRNA	p								GTGCACTAG	

9											
2	known_	ssc-miR-7140-5	-	+	-	-	-	-	-	CAACTCAAGGGGG	22
4	miRNA	p								CATCATTCA	
0											
2	known_	ssc-miR-7142-3	+	+	-	-	-	-	-	TTTGTTGGCTCCTC	22
4	miRNA	p								TGAAGTGA	
1											
2	known_	ssc-miR-7143-3	-	+	-	-	-	-	-	TCTGCACTTGAAG	23
4	miRNA	p								CTGAGACTGA	
2											
2	known_	ssc-miR-7144-5	-	+	-	-	-	-	-	ACTTTCCTGGGAT	22
4	miRNA	p								TTGGAGCGC	
3											
2	known_	ssc-miR-744	+	+	-	+	-	-	-	TGCGGGGCTAGGG	22
4	miRNA									CTAACAGCA	
4											
2	known_	ssc-miR-769-3p	-	+	-	+	+	-	-	CTGGGATCTCTGG	23
4	miRNA									GGTCTTGGTT	
5											
2	known_	ssc-miR-769-5p	-	+	-	+	+	-	-	TGAGACCTCTGGG	21
4	miRNA									TTCTGAGC	
6											
2	known_	ssc-miR-7857-3	-	+	-	-	-	-	-	ATTGTTCTCCAAC	22
4	miRNA	p								CTGGCTCTT	
7											
2	known_	ssc-miR-874	+	+	-	+	-	-	+	CTGCCCTGGCCCG	23
4	miRNA									AGGGACCGAC	
8											
2	known_	ssc-miR-885-5p	-	+	-	+	-	-	-	TCCATTACACTACC	22
4	miRNA									CTGCCTCT	
9											
2	known_	ssc-miR-9	+	+	+	+	-	+	-	TCTTTGGTTATCTA	22
5	miRNA									GCTGTATG	
0											
2	known_	ssc-miR-9-1>ssc	+	+	+	-	-	-	-	TCTTTGGTTATCTA	23
5	miRNA	c-miR-9-2								GCTGTATGA	
1											
2	known_	ssc-miR-92a	+	+	+	+	-	-	+	TATTGCACTTGTC	22
5	miRNA									CGGCCTGT	
2											
2	known_	ssc-miR-92b-3p	+	+	+	-	+	-	-	TATTGCACTCGTCC	22
5	miRNA									CGGCCTCC	
3											
2	known_	ssc-miR-92b-5p	-	+	-	-	-	-	+	AGGGACGGGACG	24
5	miRNA									CGGTGCAGTGTT	
4											
2	known_	ssc-miR-935	-	+	-	+	-	-	-	CCAGTTACCGCTT	23
5	miRNA									CCGCTACCGC	
5											
2	known_	ssc-miR-95	-	+	-	+	+	-	+	TTCAACGGGTATTT	22
5	miRNA									ATTGAGCA	
6											
2	known_	ssc-miR-96-5p	+	+	-	-	+	-	-	TTTGGCACTAGCA	23
5	miRNA									CATTTTTGCT	
7											
2	known_	ssc-miR-9785-5	+	+	-	-	-	-	-	ACCCTCATCTGG	24
5	miRNA	p								TGTCGGCACC	

8												
2	known_	ssc-miR-98	+	+	+	+	-	+	+	TGAGGTAGTAAGT	22	
5	miRNA									TGTATTGTT		
9												
2	known_	ssc-miR-9820-5	-	+	-	-	-	-	-	GAGGAGGAGGGA	21	
6	miRNA	p								AGAAAGGCT		
0												
2	known_	ssc-miR-9841-3	-	+	-	-	-	-	-	TCTAGCATCGAGC	21	
6	miRNA	p								ACCCGCCT		
1												
2	known_	ssc-miR-9843-3	-	+	-	-	-	-	-	TCTGTGAACTAGA	22	
6	miRNA	p								AACCTCTGG		
2												
2	known_	ssc-miR-9858-5	-	+	-	-	-	-	-	TTCCTGAGTCGGA	20	
6	miRNA	p								CTGGGCT		
3												
2	known_	ssc-miR-9860-5	-	+	-	-	-	-	-	TTGCCCAGAGACT	21	
6	miRNA	p								TGGACCGC		
4												
2	known_	ssc-miR-99a	+	+	+	+	-	+	+	AACCCGTAGATCC	22	
6	miRNA									GATCTTGTG		
5												
2	known_	ssc-miR-99b	+	+	+	+	-	+	+	CACCCGTAGAACC	22	
6	miRNA									GACCTTGCG		
6												
2	novel_mi	sscPC-13_1078-	-	+	-					AAAGAGATTAAG	21	
6	RNA_ID	3p								CTAGCAGC		
7												
2	novel_mi	sscPC-10_542-5	+	+	+					AACATTCATTGCT	20	
6	RNA_ID	p								GTCGGTG		
8												
2	novel_mi	sscPC-X_5180-	-	+	-					AACCCAGGGAGGT	23	
6	RNA_ID	5p								GCTGTTACC		
9												
2	novel_mi	sscPC-X_5175-	-	+	-					AAGAGTCTAACTC	21	
7	RNA_ID	3p								TCCTGTCC		
0												
2	novel_mi	sscPC-9_4946-3	-	+	-					AATCACTAATTCC	22	
7	RNA_ID	p								ACTGCCATC		
1												
2	novel_mi	sscPC-14_1393-	-	+	-					ACAGGCACGGCTG	21	
7	RNA_ID	5p								GTTTGAGC		
2												
2	novel_mi	sscPC-2_2121-3	-	+	-					ACTGACAGGAGA	22	
7	RNA_ID	P								GCATTTTAAT		
3												
2	novel_mi	sscPC-13_916-3	-	+	-					AGAGCACTCAAAA	20	
7	RNA_ID	p								AGATGGC		
4												
2	novel_mi	sscPC-16_1788-	-	+	-					AGCCACGACTACC	22	
7	RNA_ID	3p								CTGCCACTT		
5												
2	novel_mi	sscPC-16_1798-	+	+	+					AGGAAAAGGATTG	20	
7	RNA_ID	3p								GCTCTGA		
6												
2	novel_mi	sscPC-9_4946-5	-	+	-					AGGCAGTGTAATT	21	
7	RNA_ID	p								AGCTGATT		

7									
2	novel_mi	sscPC-16_1788-	-	+	-		AGGCAGTGATTG	20	
7	RNA_ID	5p					TTAGCTG		
8									
2	novel_mi	sscPC-JH11853	+	+	+		AGGGCTGGGCTCG	18	
7	RNA_ID	3.1_5202-5p					GGGGT		
9									
2	novel_mi	sscPC-7_4420-5	-	+	-		AGTCTTGATTCTCT	20	
8	RNA_ID	p					GTTTTG		
0									
2	novel_mi	sscPC-7_3903-5	-	+	-		AGTCTTGATTCTCT	22	
8	RNA_ID	p					GTTTTGTT		
1									
2	novel_mi	sscPC-2_2165-3	-	+	-		ATCCCACTGTGGC	23	
8	RNA_ID	P					CTCCCTGCCT		
2									
2	novel_mi	sscPC-7_4420-3	-	+	-		CAAAACAGAGAAT	22	
8	RNA_ID	p					CAAGACTGA		
3									
2	novel_mi	sscPC-X_5182-	-	+	-		CAACAGTCCCTGC	21	
8	RNA_ID	3p					CTGGGTAG		
4									
2	novel_mi	sscPC-7_3903-3	-	+	-		CCAAAACAGAGAA	23	
8	RNA_ID	p					TCAAGACTGA		
5									
2	novel_mi	sscPC-14_1393-	-	+	-		CCAAACCAGTTGT	21	
8	RNA_ID	3p					GCCTGTAG		
6									
2	novel_mi	sscPC-3_2470-5	+	+	+		CCAGTGATCAGGT	24	
8	RNA_ID	P					TACGATGGATT		
7									
2	novel_mi	sscPC-3_2422-3	-	+	-		CCGGGCCGGGCCG	19	
8	RNA_ID	P					GGCCGG		
8									
2	novel_mi	sscPC-3_2470-3	+	+	-		CCTCGTAGCTTGC	22	
8	RNA_ID	P					TCACCAAAT		
9									
2	novel_mi	sscPC-5_2942-3	-	+	-		CCTCTAGGGAAGA	22	
9	RNA_ID	p					GAAGGTTGG		
0									
2	novel_mi	sscPC-X_5085-	-	+	-		CGGCGGCGACTCT	19	
9	RNA_ID	3p					GGACTC		
1									
2	novel_mi	sscPC-3_2422-5	-	+	-		CGGGGCGGGTCGG	21	
9	RNA_ID	P					GGCGGGGC		
2									
2	novel_mi	sscPC-15_1674-	-	+	+		CTATTAAAGGTTC	22	
9	RNA_ID	3p					GTTTGTTC		
3									
2	novel_mi	sscPC-10_542-3	+	+	+		CTCACTGAACAAT	21	
9	RNA_ID	p					GAATGCAA		
4									
2	novel_mi	sscPC-3_2420-5	-	-	+		GAAGGATTGGCTC	18	
9	RNA_ID	P					TGAGG		
5									
2	novel_mi	sscPC-3_2515-3	-	+	-		GAGCAGGCCTGTC	24	
9	RNA_ID	p					AGGGCGTTGTC		

6									
2	novel_mi	sscPC-15_1674-	-	+	-		GATCAGGACACCC	23	
9	RNA_ID	5p					AAATGGTGCA		
7									
2	novel_mi	sscPC-X_5135-	+	+	-		GGCGGGCGGGGC	19	
9	RNA_ID	3p					CGGGGGT		
8									
2	novel_mi	sscPC-11_615-3	-	+	-		GGCGGGGCCGGG	19	
9	RNA_ID	p					GCTGGGC		
9									
3	novel_mi	sscPC-13_1079-	+	+	-		GGGCGGGCGGGG	18	
0	RNA_ID	5p					CCGGGG		
0									
3	novel_mi	sscPC-17_1897-	-	+	-		GGGTGGGGGTCTG	20	
0	RNA_ID	5p					GGGGGAG		
1									
3	novel_mi	sscPC-15_1692-	-	+	-		GGTCGCGGGGGGT	18	
0	RNA_ID	3p					GGGGG		
2									
3	novel_mi	sscPC-14_1383-	-	+	-		GGTGGGAGGGCTG	18	
0	RNA_ID	3p					AGGTC		
3									
3	novel_mi	sscPC-2_2121-5	-	+	-		TAAAATGCTATTCT	22	
0	RNA_ID	P					GTCACTGT		
4									
3	novel_mi	sscPC-X_5171-	-	+	-		TATCCAGACAGGT	21	
0	RNA_ID	5p					GCTGTTCT		
5									
3	novel_mi	sscPC-X_5178-	-	+	-		TATCCAGGCAGGT	21	
0	RNA_ID	5p					GCTGTTCT		
6									
3	novel_mi	sscPC-X_5162-	+	+	+		TCCCACATGGTCT	18	
0	RNA_ID	3p					AGCGG		
7									
3	novel_mi	sscPC-13_1078-	-	+	-		TCTGGCTTTAATCT	23	
0	RNA_ID	5p					CTGTCTTGT		
8									
3	novel_mi	sscPC-X_5180-	-	+	-		TGAACAGGGCCTT	23	
0	RNA_ID	3p					TCTGGGTCGA		
9									
3	novel_mi	sscPC-X_5178-	-	+	-		TGAACGGCGCCTG	23	
1	RNA_ID	3p					TGTGGTTAGA		
0									
3	novel_mi	sscPC-X_5170-	-	+	-		TGAACGGTGCCTG	23	
1	RNA_ID	3p					TGTGGCTAGA		
1									
3	novel_mi	sscPC-X_5170-	-	+	-		TGACCAGGCAGGT	23	
1	RNA_ID	5p					GCTGTTCTCT		
2									
3	novel_mi	sscPC-2_2103-3	-	+	-		TGAGATGAGAGCC	21	
1	RNA_ID	P					CTTGGCCA		
3									
3	novel_mi	sscPC-X_5182-	-	+	-		TGCCCAGGCAGGT	20	
1	RNA_ID	5p					GCTGATC		
4									
3	novel_mi	sscPC-13_916-5	-	+	-		TGCTCTTTTTGAG	23	
1	RNA_ID	p					AGGCTTCTGT		

