

Appendix A

miRNA	miRNA member	Sequence	length (nt)	Precursor location*
miR156	miR156-1	TTGACAGAAGATAGAGAGCACACA	22	SL2.31ch02:29896569:29896913:+
	miR156-2	TTGACAGAAGATAGAGAGCACACA	22	SL2.31ch02:47056938:47057041:+
	miR156-3	TTGACAGAAGATAGAGAGCACACA	22	SL2.31ch06:39242293:39242433:-
	miR156-4	TTGACAGAAGATAGAGAGCACACA	22	SL2.31ch03:61720297:61720457:+
	miR156-5	TGACAGAAGAGAGTGAGCAC	20	SL2.31ch07:324077:324186:+
	miR156-6	TGACAGAAGAGAGTGAGCAC	20	SL2.31ch08:49275740:49275868:+
	miR156-7	TGACAGAAGAGAGTGAGCAC	20	SL2.31ch07:48503172:48503275:+
	miR156-8	TGACAGAAGAGAGTGAGCAC	20	SL2.31ch08:49122413:49122548:-
	miR156-9	TGACAGAAGAGAGTGAGCAC	20	SL2.31ch08:49142660:49142895:-
	miR156-10	TGACAGAAGAGAGTGAGCAC	20	SL2.31ch08:49142847:49143193:-
	miR156-11	TGACAGAAGAGAGTGAGCAC	20	SL2.31ch08:49143343:49143448:-
	miR156-12	ATGACAGAAGCATAGAGAGCAC	22	SL2.31ch06:39242049:39242345:+
	miR156-13	TTGATAGAAGATAGAGAGCAC	21	SL2.31ch02:29897624:29897956:+
	miR156-14	TGACAGAAGAGAGTGGGCAC	20	SL2.31ch08:49142418:49142653:-
	miR156-15	ACAGAAGATAGAGAGCACTAA	21	---
	miR156-16	TGTCAGAAGAGAGTGAGCAC	20	---
	miR156-17	TGACAGAAGATAGAGAGCAC	20	---
	miR156-18	CTGACAGAAGATAGAGAGCAC	21	---
	miR156-19	TTGACAGAAGATAGAGGGGCAC	21	---
	miR156-20	TTGACAGAAGAGAGAGAGCAC	21	---
	miR156-21	TTGACAGAAGAAAGAGAGCAC	21	---
	miR156-22	TGACAGAAGAGAGGGAGCAC	20	---
	miR156-23	TGACAGAAGAGAGCGAGCAC	20	---
	miR156-24	CAGAAGATAGAGAGCACTAAT	21	---
	miR156-25	TGACAGAGGAGAGTGAGCAC	20	---
	miR156-26	CGACAGAAGAGAGTGAGCAC	20	---
	miR156-27	CAGAAGATAGAGAGCACTTGA	21	---
	miR156-28	TTGACAGAAGACAGCGAGCAC	21	---
	miR156-29	TGACAGAAGAAAGGGAGCAC	20	---
miR159	miR159-1	TTTGGATTGAAGGGAGCTCTA	21	SL2.31ch03:61786055:61786530:+
	miR159-2	TTTGGATTGAAGGGAGCTCTT	21	---
	miR159-3	AGCTGCCGACTCATTATCC	20	---
	miR159-4	TTGGACTGAAGGGAGCTCCTT	21	---
	miR159-5	AGCTGCTGACCTATGGATTCC	22	---
	miR159-6	TTTGGATTGAAGGGAGTCCT	20	---
	miR159-7	TTGGACTGAAGGGAGCTCCT	20	---
	miR159-8	ATTGGATTGAAGGGAGCTCTA	21	---
	miR159-9	TTTGGATTGAAGGGAGCTCCG	21	---
	miR159-10	TTTGGACTGAAGGGAGCTCTA	21	---

miR160	miR160	TGCCTGGCTCCCTGTATGCCA	21	SL2.31ch02:16516114:16516230:-
miR162	miR162-1	TCGATAAACCTCTGCATCCAG	21	SL2.31ch03:58491802:58491923:+
	miR162-2	TCGATAAGCCTCTGCATCCAG	21	---
miR164	miR164-1	TGGAGAAGCAGGGCACGTGCA	21	SL2.31ch01:81732369:81732480:+
	miR164-2	TGGAGAAGCAGGGCACGTGCA	21	SL2.31ch09:7199085:7199264:+
	miR164-3	TGGAGAAGCAGGGCACGTGCT	21	---
	miR164-4	TGGAGAAGCAGGGTACGTGCT	21	---
	miR164-5	TGGAGAAGCAGGGCACTTATTT	22	---
miR166	miR166-1	TCGGACCAGGCTTCATTCCCTC	21	SL2.31ch01:84382176:84382342:-
	miR166-2	TCGGACCAGGCTTCATTCCCC	21	SL2.31ch01:79167349:79167499:+
	miR166-3	TCGGACCAGGCTTCATTCCCC	21	SL2.31ch03:292977:293086:-
	miR166-4	TCGGACCAGGCTTCATTCCCC	21	SL2.31ch03:46024099:46024273:-
	miR166-5	TCGGACCAGGCTTCATTCCCC	21	SL2.31ch06:33129796:33129913:+
	miR166-6	TCGGACCAGGCTTCATTCCCC	21	SL2.31ch06:2516239:2516359:-
	miR166-7	TCGGACCAGGCTTCATTCCCC	21	SL2.31ch08:2978416:2978522:+
	miR166-8	TCGGACCAGGCTTCATTCCCC	21	SL2.31ch08:62860611:62860786:+
	miR166-9	TCGGACCAGGCTTCATTCCCC	21	SL2.31ch09:64446982:64447193:-
	miR166-10	TCGGACCAGGCTTCATTCCCC	21	SL2.31ch10:3321738:3321949:+
	miR166-11	TCGGACCAGGCTTCATTCCCT	20	SL2.31ch01:84382176:84382342:-
	miR166-12	TCGGACCAGGCTTCATTCCCTT	21	---
	miR166-13	TCGGATTAGGCTTCATTCCCTC	21	---
	miR166-14	TCGGACCAGGCTTCATTCCCT	21	---
	miR166-15	TCGAACCAGGCTTCATTCCCC	21	---
	miR166-16	TCGGACCAGGCTTCATCCCT	20	---
	miR166-17	TCGGACCAGGCTTCATCCCC	20	---
	miR166-18	TTCGGACCAGGCTTCATTCCC	21	SL2.31ch03:46024099:46024273:-
	miR166-19	TCGGATCAGGCTTCATTCCCTC	21	---
	miR166-20	TCGGGCCAGGCTTCATTCCCC	21	---
	miR166-21	TCGGACCAGGCTTCATTCCCTA	21	---
	miR166-22	TCGGACCAGGCTTCATTCCCCA	22	---
	miR166-23	TCGGACCAGGCTTCATTCCATT	22	---
	miR166-24	TCGGACCAGGCTTCATTCCCCG	21	---
	miR166-25	TCGGACCAGGCTTCATCCCCC	21	---
	miR166-26	TCGGACCAGGCTTCAATCCCT	21	---
miR167	miR167-1	TCAAGCTGCCAGCATGATCTA	21	---
	miR167-2	TGAAGCTGCCAGCATGATCTA	21	SL2.31ch06:45631201:45631299:-
	miR167-3	TGAAGCTGCCAGCATGATCTA	21	SL2.31ch09:59576378:59576478:+
	miR167-4	TGAAGCTGCCAGCATGATCTA	21	SL2.31ch09:59585156:59585248:+
	miR167-5	TGAAGCTGCCAGCATGATCTA	21	SL2.31ch09:63883763:63883855:+
	miR167-6	TGAAGCTGCCAGCATGATCTT	21	---
	miR167-7	TGAAGCTGCCAGCATGATCTC	21	---
	miR167-8	TAAAGCTGCCAGCATGATCTGG	22	SL2.31ch02:33394768:33395024:-

	miR167-9	TGAAGCTGCCAGCATGATCTG	21	---
	miR167-10	TGAAGCTGACAGCATGATCTA	21	---
	miR167-11	TAAAGCTGCCAGCATGATCTTT	22	---
	miR167-12	TGAAGCTGCCAGCATGATCTGA	22	---
	miR167-15	GGAAGCTGCCAGCATGCTCTT	21	---
	miR167-13	TGAATCTGCCAACATGATCTA	21	---
	miR167-14	TGAAGCTGCCAGCATGATCTAA	22	SL2.31ch06:45631201:45631299:-
	miR167-16	AGATCATGTGGCAGCATCACC	21	SL2.31ch09:63883763:63883855:+
miR168	miR168-1	TCGCTTGGTGCAGGTCGGGAC	21	SL2.31ch08:558740:558926:+
	miR168-2	TCGCTTGGTGCAGGTCGGGAC	21	SL2.31ch12:63569283:63569458:+
	miR168-3	TCGCTTGGTGCAGATCGGGAC	21	---
	miR168-4	TTGCTTGGTGCAGGTCGGGAC	21	---
	miR168-5	TCGCTTGGCAGGTCGGGAC	20	---
	miR168-6	TCGCTTGGTGCAGGTCGGGACC	22	SL2.31ch08:558740:558926:+
miR169	miR169-1	TAGCCAAGGATGACTTGCCCTG	21	SL2.31ch03:9593042:9593178:+
	miR169-2	TAGCCAAGGATGACTTGCCCTG	21	SL2.31ch03:9600517:9600659:-
	miR169-3	TAGCCAAGGATGACTTGCCCTG	21	SL2.31ch07:2174503:2174606:+
	miR169-4	TAGCCAAGGATGACTTGCCCTG	21	SL2.31ch07:2174503:2174606:+
	miR169-5	TAGCCAAGGATGACTTGCCCTG	21	SL2.31ch07:2180708:2180839:+
	miR169-6	TAGCCAAGGATGACTTGCCCTA	21	SL2.31ch07:2171619:2171735:-
	miR169-7	TAGCCAAGGATGACTTGCCCTA	21	SL2.31ch08:52708105:52708227:+
	miR169-8	TAGCCAAGGATGACTTGCCCTA	21	SL2.31ch08:54808245:54808381:+
	miR169-9	TAGCCAAGGATGACTTGCCCTA	21	SL2.31ch08:54909669:54909782:+
	miR169-10	CAGCCAGGGATGACTTGCCGA	21	SL2.31ch07:4134649:4134768:-
	miR169-11	CAGCCAAGGATGACTTGCCGA	21	SL2.31ch01:41799039:41799201:-
	miR169-12	CAGCCAAGGATGACTTGCCGA	21	SL2.31ch07:4210804:4210893:+
	miR169-13	TAGCCAAGGATGACTTGCCCTGCA	23	SL2.31ch03:9593042:9593178:+
	miR169-14	TGAGCCAAGGATGACGTTGTTG	22	---
	miR169-15	CAGCCAAGGATGACTTGCCGG	21	SL2.31ch02:44891429:44891516:+
miR171	miR171-1	TTGAGCCGCGCCAATATCAC	20	SL2.31ch12:2883986:2884092:+
	miR171-2	TTGAGCCGTGCCAATATCAC	20	SL2.31ch02:39361558:39361659:-
	miR171-3	TTGAGCCGTGCCAATATCAC	20	SL2.31ch07:58138713:58138813:+
	miR171-7	TGATTGAGCCGTGCCAATATT	21	--
	miR171-4	TGATTGAGCCGTGCAATATC	21	SL2.31ch02:27921036:27921124:-
	miR171-5	TGATTGAGTCGTGCCAATATC	21	---
	miR171-6	TTGAGCCGTGCCAATATCATA	21	SL2.31ch06:40812599:40812697:+
miR172	miR172-1	AGAATCTTGATGATGCTGCAT	21	SL2.31ch05:64340220:64340343:+
	miR172-2	AGAATCTTGATGATGCTGCAT	21	SL2.31ch06:42920554:42920697:+
	miR172-3	AGAATCTTGATGATGCTGCAT	21	SL2.31ch11:2634502:2634661:+
	miR172-4	AGAATCTTGATGATGCTGCAT	21	SL2.31ch11:51480479:51480633:+
	miR172-5	GGAATCTTGATGATGCTGCAG	21	---
	miR172-6	AGAATCTTGATGATGCTGCAG	21	SL2.31ch04:4093702:4093866:-

	miR172-7	GGAATCTTGATGATGCTGCAT	21	SL2.31ch06:654153:654305:+
	miR172-8	AGAATCTTGATGATGCTGCA	20	SL2.31ch05:64340220:64340343:+
	miR172-9	GAGAATCTTGATGATGCTGCAT	22	---
	miR172-10	GAATCTTGATGATGCTGCAT	20	SL2.31ch05:64340220:64340343:+
	miR172-11	GAATCTTGATGATGCTGCAT	20	SL2.31ch06:42920554:42920697:+
	miR172-12	GAATCTTGATGATGCTGCAT	20	SL2.31ch11:2634502:2634661:+
	miR172-13	GAATCTTGATGATGCTGCAT	20	SL2.31ch11:51480479:51480633:+
	miR172-14	AGAATCCTGATGATGCTGCAT	21	---
	miR172-15	TGAATCTTGATGATGCTGCA	20	---
miR390	miR390-1	AAGCTCAGGAGGGATAGCACC	21	SL2.31ch10:58673173:58673282:-
	miR390-2	AAGCTCAGGAGGGATAGCGCC	21	SL2.31ch06:1372076:1372242:-
	miR390-3	AAGCTCAGGAGGGATAGCGCC	21	SL2.31ch09:8389308:8389407:+
	miR390-4	CGCTATCCATCCTGAGTTTT	20	---
	miR390-5	GAGCTCAGGAGGGATAGCACC	21	---
	miR390-6	AAGCCAGGAGGGATAGCGCC	21	---
	miR390-7	GAGCTCAGGAGGGATAGCACCT	22	---
miR393	miR393-1	TCCAAAGGGATCGCATTGATT	21	SL2.31ch04:63483476:63483621:+
	miR393-2	TCCAAAGGGATCGCATTGATC	21	SL2.31ch03:7463062:7463178:+
	miR393-3	TCCAAAGGGATCGCATTGATC	21	SL2.31ch05:62170740:62171106:-
miR394	miR394-1	AGGTGGGCATACTGTCAACA	20	SL2.31ch04:63483476:63483621:+
	miR394-2	TTGGCATTCTGTCCACCTCC	20	SL2.31ch01:84523255:84523333:+
	miR394-3	AGGTGGGCATACTGTCAACA	20	SL2.31ch04:63483476:63483621:+
	miR394-4	TTGGCATTCTGTCCACCTCC	20	SL2.31ch01:84523255:84523333:+
	miR394-5	AGATTGTTGGCTACACTTT	19	---
miR395	miR395-1	CTGAAGTGTTGGGGGAAGTC	21	---
	miR395-2	CTGAAGTGTTGGGGGAAGTC	21	SL2.31ch02:27507623:27507793:-
	miR395-3	CTGAAGTGTTGGGGGAAGTC	21	SL2.31ch02:27507935:27508025:-
	miR395-4	CTGAAGTGTTGGGGGAAGTC	21	SL2.31ch02:27532187:27532358:-
	miR395-5	CTGAAGTGTTGGGGGAAGTC	21	SL2.31ch03:30608971:30609311:+
	miR395-6	CTGAAGTGTTGGGGGAAGTC	21	SL2.31ch03:30609449:30609543:+
	miR395-7	CTGAAGTGTTGGGGGAAGTC	21	SL2.31ch05:1702993:1703160:+
	miR395-8	CTGAAGTGTTGGGGGAAGTC	21	SL2.31ch05:1705338:1705506:+
	miR395-9	CTGAAGTGTTGGGGGAAGTC	21	SL2.31ch05:1716611:1716702:+
	miR395-10	TTGAAGTGTTGGGGGAAGTC	21	---
	miR395-11	CTGAAGTATTTGGAGGAAGTC	21	---
miR396	miR396-1	TTCCACAGCTTTCTTGAAGTG	21	SL2.31ch00:12536950:12537067:+
	miR396-2	TTCCACAGCTTTCTTGAAGTG	21	SL2.31ch12:2906849:2906998:-
	miR396-3	TTCCACAGCTTTCTTGAAGTT	21	SL2.31ch12:2900288:2900569:+
	miR396-4	TTCCACAGCTTTCTTGAAGTT	21	SL2.31ch07:2628751:2628893:-
	miR396-5	TTCCACAGCTTTCTTGAAGTA	21	---
	miR396-6	TTCCACGGCTTTCTTGAAGTT	21	---
	miR396-7	TCCACAGGCTTTCTTGAAGTG	21	---

	miR396-8	TTCCACAGCTTTCTTGAAGCTGT	22	---
	miR396-9	AAGAAAGCTGTGGGAAAAGATGG	23	SL2.31ch07:2628751:2628893:-
	miR396-10	TTCCAAGAAAGCTGTGGGAAA	21	---
miR397	miR397-1	ATTGAGTGCAGCGTTGATGA	20	SL2.31ch07:63286844:63286946:-
	miR397-2	CCATTGAGTGCAGCGTTGATG	21	---
	miR397-3	TTATTGAGTGCAGCGTTGATG	21	---
	miR397-4	TCGTTGAGTGCAGCGTTGATG	21	---
	miR397-5	TCATTGAGTGCAGCGTTGATT	21	---
	miR397-6	TCATTGAGTGCATCGTTGATG	21	---
	miR397-7	TCATTGAGTGCAGCGTTGATG	21	---
	miR397-8	TCATTGAGCGCAGCGTTGATG	21	---
miR398	miR398-1	TATGTTCTCAGGTCGCCCTA	21	---
	miR398-2	TATGTTCTCAGGTCGCCCTT	21	---
	miR398-3	TGTGTTCTCAGGTCGCCCTG	21	---
	miR398-4	TGTGTTCTCAGGTCACCCCTT	21	---
	miR398-5	TGTGTTCTCAGGTCACCCCT	20	---
miR399	miR399-1	TGCCAAAGGAGAGCTGCCCTG	21	SL2.31ch03:8200031:8200117:+
	miR399-2	TGCCAAAGGAGAGCTGCCCTG	21	SL2.31ch03:8203632:8203718:+
	miR399-3	TGCCAAAGGAGAGCTGCCCTG	21	SL2.31ch03:8208553:8208715:+
	miR399-4	TGCCAAAGGAGAGCTGCCCTG	21	SL2.31ch03:8246075:8246195:-
	miR399-5	CGCCAAAGGAGAGCTGCCCTG	21	SL2.31ch03:8198221:8198307:-
	miR399-6	CGCCAAAGGAGAGCTGCCCTG	21	SL2.31ch03:8202272:8202358:-
	miR399-7	CGCCAAAGGAGAGCTGCCCTG	21	SL2.31ch03:8206598:8206684:-
	miR399-8	TGCCAAAGAAGATTGCCCCG	21	SL2.31ch03:731281:731383:+
	miR399-9	TGCCAAAGGAGAATTGCCCTG	21	SL2.31ch03:740616:740741:+
	miR399-10	TGCCAAAGGAGAGCTGTCCTG	21	---
	miR399-11	TGCCAAAGGAGAGTTGCCCT	20	SL2.31ch03:8247343:8247434:+
	miR399-12	TGCCAAAGGAGAGTTGCCCT	20	SL2.31ch08:60676694:60676797:-
	miR399-13	TGCCAAAGGAGAGTTGCCCTA	21	---
	miR399-14	TGCCAAAGGAGAGCTGCCCTA	21	---
miR403	miR403	CTAGATTCACGCACAAGCTCG	21	SL2.31ch01:70880191:70880287:+
miR408	miR408-1	TGCACTGCCTCTTCCCTGGCT	21	---
	miR408-2	TGCACTGCCTCTTCCCTGGCTG	22	---
Non-conserved miRNA family	miRNA member	Sequence	Sequence length (nt)	Precursor location
miR1023	miR1023-1	AGAGATTGGGGAAGTGCAT	20	---
	miR1023-2	AGAGATTGGAGAGAGTGGCT	20	---
miR1026	miR1026-1	TGTGAAATGACTTGAGAGTACA	22	---
	miR1026-2	TGTGAAATGACTTGAGAGGACT	22	---
miR1030	miR1030	TCTGCATTGACCTGCACCT	21	SL2.31ch09:1677515:1677610:+

miR1863	miR1863-1	ATGCTCTGATACCATGTTAGATT	23	---
	miR1863-2	GCTCTGATACCATGTTAGATTA	22	---
	miR1863-3	AAGCTCTGATACCATGTTAGATT	23	---
	miR1863-4	TGCTCTGATACCATGTTAGATTA	23	---
miR1873	miR1873-1	TCAACATGGTATCAGAGCTGG	21	---
	miR1873-2	TCAACATGGTATCAGAGCAGGAAC	24	---
miR1916	miR1916-1	TATTTCACTTAGACACCTCAA	21	---
	miR1916-2	TAATTCCTTAGACACTTCAA	21	---
miR1919	miR1919-1	ACGAGAGTCATCTGTGACAGG	21	SL2.31ch08:53775877:53775987:+
	miR1919-2	ACGAGAGTCATCTGTGACAGG	21	SL2.31ch08:53789395:53789505:+
	miR1919-3	ACGAGAGTCATCTGTGACAGG	21	SL2.31ch08:53820966:53821085:+
	miR1919-4	ACGAGAGTCATCTGTGACAGG	21	SL2.31ch12:6989900:6990020:-
miR2911	miR2911-1	GGCCGGGGGACGGACTGGGAA	21	---
	miR2911-2	GGCCGGGGGACGGACTGGGA	20	---
miR3627	miR3627-1	TTGTTCGAGGAGAGATGGCACT	22	SL2.31ch02:44533392:44533493:+
	miR3627-2	TTGTTCGAGGAGAGATGGCACT	22	SL2.31ch02:44533392:44533493:+
miR4376	miR4376-1	TACGCAGGAGAGATGATGCTGG	22	SL2.31ch06:4541840:4541931:+
	miR4376-2	TACGCAGGAGAGATGATGCTG	21	SL2.31ch06:4541840:4541931:+
miR477	miR477-1	ACTCTCCCTCAAAGGCTTCTG	21	---
	miR477-2	ACTCTCCCTCAAAGGCTTCTG	21	---
	miR477-3	CTCTCCCTCAAAGGCTTCTGG	21	---
miR482	miR482-1	TCTTGCTACACCGCCATGCC	22	SL2.31ch06:33869747:33869841:-
	miR482-2	TCTTTCTACTCCTCCATAACC	22	SL2.31ch04:55141374:55141468:+
	miR482-3	TCTTGCCAATACCGCCATTCC	22	SL2.31ch06:33877505:33877598:-
	miR482-4	TCTTGCTACACCGCCATAACC	22	---
	miR482-5	TATTTCCAATTCCACCCATTCC	22	---
miR528	miR528	TGGAAGGGGCATGCAGAGGAG	21	---
miR530	miR530	TGCATTTGCACCTGCACCTTA	21	SL2.31ch09:1677515:1677610:+
miR818	miR818	TTTTGAAACGGAGGGAGTAT	20	---
miR827	miR827	TTAGATGAACATCAACAAACA	21	SL2.31ch12:63794851:63794960:+
miR845	miR845-1	AAGCTCTGATACCAAGTGAG	20	---
	miR845-2	CTGCTCTGATACCACTTGATAG	22	---
	miR845-3	TAGCTCTGATACCAATGGAGGA	22	---
	miR845-4	TCTGCTCTGATACCATATTGAAG	23	---
	miR845-5	TGACTCTGATACCAGTTGATG	21	---
	miR845-6	ATGACTCTGATACCAGTTGATG	22	---
	miR845-7	TGCTCTGATACCAAGTGAAA	20	---
miR894	miR894	CGTTTCACGTCGGGTTACCA	21	---
miR1112	miR1112	CGGAATGGTATACAAAGTCA	20	---
miR1310	miR1310	GGCCTCGGGGGCGCAACGCCCT	22	---
miR1510	miR1510	TTACCATTCCCCCATTCAT	21	---
miR1511	miR1511	AACCTGGCTCTGATACCATC	20	---

<u>miR1535</u>	miR1535	<u>CTTGTTTGATTGTCATGTCT</u>	20	---
<u>miR1917</u>	miR1917	<u>CTTAATAAAGAGTGCTAAAGTC</u>	22	---
<u>miR2096</u>	miR2096	<u>CTGAGTGGAAATCGGAGGGA</u>	20	---
<u>miR2916</u>	miR2916	<u>TGGGGGCTCGAAGACGATCAGAT</u>	23	---
<u>miR3515</u>	miR3515	<u>AATGTAGAAAATAAAGGGTT</u>	20	---
<u>miR3946</u>	miR3946	<u>TTGACAGAAAGAGAAGTGAGCAC</u>	23	---
<u>miR3954</u>	miR3954	<u>TTGGACAGAGAAATCACGGTCA</u>	22	---
<u>miR902</u>	miR902	<u>TTTGATCGCAGATTCTTCAGCT</u>	22	---
<u>miR1044</u>	miR1044	<u>ATGTAGATGCATGTTTGT</u>	21	---
<u>miR2118</u>	miR2118	<u>TTACCGATTCCCCCATTCCAA</u>	22	---
<u>miR2871</u>	miR2871	<u>TATTTTATTTTCTATCGTCAC</u>	21	---
<u>miR2926</u>	miR2926	<u>AGGTAAGTCGATGTTGGTGCT</u>	21	---
<u>miR3624</u>	miR3624	<u>TCAGGGCAGCAGCATACTACT</u>	21	---
<u>miR414</u>	miR414-1	<u>ATCATCATCATCATCGTCCG</u>	22	---
	miR414-2	<u>TCATCATCATCATCGTCC</u>	21	---
<u>miR417</u>	miR417	<u>GAAGCTAGTGAATTCGTTCTGA</u>	21	---
<u>miR419</u>	miR419	<u>TGACGATGATGACGATGTTT</u>	20	---
<u>miR774</u>	miR774-1	<u>TGAAATGAAGAATTGGTGAT</u>	20	---
	miR774-2	<u>TGAAGATGAAGGTGTGGATGAC</u>	22	---
<u>miR829</u>	miR829	<u>TGCTCTGATACCAATTGATGGAAT</u>	24	---
<u>miR846</u>	miR846	<u>TAAAGTGAAGATGCTTGAATT</u>	22	---
<u>miR858</u>	miR858	<u>ATTCATTGTCTGTTTCGTCCTT</u>	22	---

The common miRNA families/sequences of two tomato libraries are underlined in green.

Specific miRNA families/sequences in *S. lycopersicum* are underlined in red.

Specific miRNA families/sequences in *S. habrochaites* are underlined in blue.

“---” stands by no perfect precursors found.

* precursor location: precursors are predicted on *S. lycopersicum* Build2.31 genome.

Appendix B Identification the expression of conserve miRNAs family in SL and SH by deep sequencing

miRNA family	Nomerlized abundant of miRNAs in SL	Nomerlized abundant of miRNAs in SH	Ratio(SL:SH)
MiR156	159901.2333	143478.2202	1.114463457
miR159	106.9278499	103.1790361	1.036333096
miR160	6.141748987	3.447091239	1.781719299
miR162	312.185101	174.5747224	1.788260618
miR164	560.4345951	316.1391643	1.772746494
miR166	15103.66627	14195.58913	1.063968965
miR167*	11091.63017	4047.819919	2.740149114
miR168	11321.7615	8094.354483	1.398723212
miR169	413.9538817	263.6732672	1.569950136
miR171*	32.48985214	13.08726165	2.482555404
miR172	236.334501	246.8467879	0.957413718
miR390	232.2195292	451.8610787	0.513917972
miR393	0.675592389	0.525827477	1.284817584
miR394*	18.7937519	8.47166491	2.218424843
miR395	1.228349797	1.168505505	1.051214387
miR396*	280.1251713	135.3129375	2.070202425
miR397*	4.72914672	409.035352	0.011561707
miR398	4.66772923	3.797642891	1.229112206
miR399	12.95909036	9.69859569	1.336182142
miR403	130.8806709	206.8254744	0.632807304
miR408*	13.08192534	131.1063176	0.099781045

Appendix C The prediction target genes for non-conserved miRNAs

miRNAs	Target protein	Target function	Targeted sequence
Specific miRNAs in SL library			
miR1112	Receptor-like protein kinase	Protein phosphorylation	SGN-U601627
miR1310	unknown	unknown	SGN-U592384
miR1510	MFS-type transportor	unknown	SGN-U566744
miR1511	---	---	---
miR1535	calmodulin-binding transcription activator 5	transcription regulator	SGN-U588708
miR1917	unknown	unknown	SGN-U590122
miR2096	unknown	unknown	SGN-U587201
miR2916	---	---	---
miR3515	unknown	unknown	SGN-U565672
miR3946	---	---	---
miR3954	---	---	---
miR902	transcription initiation factor	unknown	SGN-U574246
Specific miRNAs in SH library			
miR1044	transcription factor-like protein	transcription factor	SGN-U566127
miR2118	Cc-nbs-lrr resistance protein	disease resistance	SGN-U587858
			SGN-U583158
miR2871	ring-figure family	unknown	SGN-U568768
miR2926	cytokinin oxidase/dehydrogenase	cytokinins metabolism	SGN-U586221
			SGN-U586220
miR3624	ADP-glucose pyrophosphorylase large subunit 1	DNA binding	SGN-U570203
miR414	---	---	---
miR417	pentatricopeptide repeated-containing protein	stress responses	SGN-U575529
miR419	DNA-polymerase V	DNA-directed DNA polymerase activity	SGN-U569854
miR774	unknown	unknown	SGN-U574930
	PAFD103 protein	unknown	SGN-U580762
miR829	---	---	---
miR846	unknown	unknown	SGN-U571443
miR858	MYB-related transcription factor	unknown	SGN-U571443