

S2 Table. Identification of miRNAs from *I. scapularis* genome.

miRNA	mature Sequence	miRBase Accession Number	<i>Ixodes</i> genome ID	Blast Hit info	strand	Pre-Mature Seq	MFE	bp	G+C %	MFE I
rmi-miR-9b	UCUUUGGU UAUCUAGC UGUAUGA	New Finding	DS885551	436513 to 436535	plus	AGGCGCTGATATTTTCTTTGGTTA TCTAGCTGTATGAGTGATATTAAC ATCATAAAGCTAGGTTACCAAAG TTAACAGCACTGCCG	-34.70	86	38.4	-1.05
hlo-miR-307	UCACAACCU CCUUGAGU GAG	New Finding	DS911299	1700331 to 1700311	minus	AGGGCCTTCCTCACTCAGTTTGGC TGTGGTGTAAACGGGCGCTCGACCC ATCACAACTCCTTGAGTGAGTGA GGCTC	-40.00	78	59.0	-0.87
prd-miR-235	UAUUGCAC UCGUCCCGG CCUG	New Finding	DS639501	298055 to 298036	minus	CAGGTCTGGATGAGTGCCAATGTT GCGTAAATGCTGAATATTGCACTC GTCCCGGCCTT	-29.40	59	50.8	-0.98
rmi-miR-5317a	UUUCUUGU CUCUGUGU CGUCGUUU	New Finding	DS677713	284899 to 284882	minus	GTCTGCAAAAACGAGCAAGCGC TGATTGGGCCGTCTCTGTGTCGTC GTTTCCTCAGGTGCGGAG	-19.10	65	56.92	-0.52
dme-miR-125	UCCUGAG ACCUAACU UGUGA	New Finding	DS978597	217092 to 217071	minus	CCCCACTCCCTGAGACCCTAACTT GTGATGCGTTCTGCGCCGCCTTCC CAGGTTAGATTCTCAGGCCCTGGG T	-32.10	73	60.27	-0.73
isc-miR-10	UACCCUGU AGAUCCGA AUUGU	MI001226 2	DS891538	2780819 to 2780840	plus	TCTACATCTACCCTGTAGATCCGA ATTTGTCTGCAACAAGACTACAAA TTCGGTTCTAGAGAGGTTTGTGTG GT	-31.10	74	50	-0.84
isc-miR-133	UUGGUCCCC UUCAACCA GCUGU	MI001226 6	DS613658	228784 to 228763	minus	ACCAACTTTAGCTGGCTGAAGCCG GGCCAAATCGTCATAATTCCCATG AAAAGGAATCTCAATACATTTGGT CCCCTTCAACCAGCTGTGGTTGGC	-42.00	96	47.92	-0.91

miRNA	mature Sequence	miRBase Accession Number	<i>Ixodes</i> genome ID	Blast Hit info	strand	Pre-Mature Seq	MFE	bp	G+C %	MFE I
isc-miR-124	UAAGGCAC GCGGUGAA UGCCAAG	MI001226 5	DS840700	85204 to 85226	plus	GCTCTCCGTATTCCTGCGCGCCT TGATGTGCCCAAACGTATCATAAG GCACGCGGTGAATGCCAAGAGG	-36.20	70	55.71	-0.93
isc-miR-5310	UGUAGUCU GGCAGAAA CGUCG	MI001849 0	DS649088	485403 to 485383	minus	GCGGCGTTTGGTTCGGACTACACCG TGAGGGTGCTCCTGGAGTCGAGG TGTAGTCTGGCAGAAACGTCGG	-37.40	69	62.32	-0.87
isc-miR-305	AUUGUACU UCAUCAGG UGCUCUG	MI001644 4	DS945001	228337 to 228315	minus	AGTTAATTGTACTTCATCAGGTGC TCTGGAGTTCGGTTCGCACAACCA GGCATCTTTTGGAGTGCAAATGAT A	-29.30	73	43.84	-0.92
isc-let-7	UGAGGUAG UAGGUUGU AUAGU	MI001226 0	No hits							

Isc-Ixodes scapularis;
rmi-Rhipicephalus microplus;
hlo-Haemaphysalis longicornis;
dme-Drosophila melanogaster;
prd-Panagrellus redivivus