

Supplementary Information

Serum exosomal miRNAs for grading hepatic fibrosis due to schistosomiasis

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Supplementary Tables

Table S1. Primers and probe used for optimal reference gene identification.

	Target miRNA	Sequence (5'-3')
RT primer pool	let-7a-5p	CAGTGCAGGGTCCGAGGTCAGAGCCACCTGGGCAATTTTTTTTTTAACTAT
	miR-16-5p	CAGTGCAGGGTCCGAGGTCAGAGCCACCTGGGCAATTTTTTTTTTCGCCAA
	miR-23a-3p	CAGTGCAGGGTCCGAGGTCAGAGCCACCTGGGCAATTTTTTTTTTGGAAT
	miR-26a-5p	CAGTGCAGGGTCCGAGGTCAGAGCCACCTGGGCAATTTTTTTTTTAGCCTA
	miR-101-3p	CAGTGCAGGGTCCGAGGTCAGAGCCACCTGGGCAATTTTTTTTTTCAGTTA
	miR-103a-3p	CAGTGCAGGGTCCGAGGTCAGAGCCACCTGGGCAATTTTTTTTTTCATAGC
	miR-221-3p	CAGTGCAGGGTCCGAGGTCAGAGCCACCTGGGCAATTTTTTTTTTGAAACC
	miR-423-5p	CAGTGCAGGGTCCGAGGTCAGAGCCACCTGGGCAATTTTTTTTTTAAAGTC
	miR-425-5p	CAGTGCAGGGTCCGAGGTCAGAGCCACCTGGGCAATTTTTTTTTTCAACGG
	miR-181a-5p	CAGTGCAGGGTCCGAGGTCAGAGCCACCTGGGCAATTTTTTTTTTACTCAC
	miR-191-5p	CAGTGCAGGGTCCGAGGTCAGAGCCACCTGGGCAATTTTTTTTTTCAGCTG
	miR-631	CAGTGCAGGGTCCGAGGTCAGAGCCACCTGGGCAATTTTTTTTTTGCTGAG
	Forward primers	let-7a-5p
miR-16-5p		GTAGCAGCACGTAATATTGGC
miR-23a-3p		GATCACATTGCCAGGGATTC
miR-26a-5p		GTTCAAGTAATCCAGGATAGGC
miR-101-3p		GGTACAGTACTGTGATAACTGAA
miR-103a-3p		GAGCAGCATTGTACAGGGC
miR-221-3p		GAGCTACATTGTCTGCTGGG
miR-423-5p		TGAGGGGCAGAGAGCG
miR-425-5p		GAATGACACGATCACTCCCG
miR-181a-5p		GAACATTCAACGCTGTCCG
miR-191-5p		GCAACGGAATCCCAAAGC
miR-631		AGACCTGGCCCAGACC
Universal reverse primer		CAGTGCAGGGTCCGAGGT
Universal double-quenched probe	56-FAM/CAGAGCCAC/ZEN/CTGGGCAATTT/3IABkFQ	

Table S2. Primers and probe used for quantification of serum exosomal miRNA candidates for grading the intensities of liver fibrosis in a murine schistosomiasis model.

	Target miRNA	Sequence (5'-3')
RT primer pool	mmu-miR-92a-3p	CAGTGCAGGGTCCGAGGTCAGAGCCACCTGGGCAATTTTTTTTTTTCAGGCC
	mmu-miR-150-5p	CAGTGCAGGGTCCGAGGTCAGAGCCACCTGGGCAATTTTTTTTTTCACTGG
	mmu-miR-192-5p	CAGTGCAGGGTCCGAGGTCAGAGCCACCTGGGCAATTTTTTTTTTTGGCTGT
	mmu-miR-let-7a-5p/let-7d-5p	CAGTGCAGGGTCCGAGGTCAGAGCCACCTGGGCAATTTTTTTTTTAACYAT
	mmu-miR-200b-3p	CAGTGCAGGGTCCGAGGTCAGAGCCACCTGGGCAATTTTTTTTTTTCATCAT
	mmu-miR-146a-5p	CAGTGCAGGGTCCGAGGTCAGAGCCACCTGGGCAATTTTTTTTTTAACCCA
	mmu-miR-151-3p	CAGTGCAGGGTCCGAGGTCAGAGCCACCTGGGCAATTTTTTTTTTCTCAA
	mmu-miR-532-5p	CAGTGCAGGGTCCGAGGTCAGAGCCACCTGGGCAATTTTTTTTTTACGGTC
	mmu-miR-103a-3p	CAGTGCAGGGTCCGAGGTCAGAGCCACCTGGGCAATTTTTTTTTTTCATAGC
Forward primers	mmu-miR-92a-3p	GGTATTGCACTTGTCCCGG
	mmu-miR-150-5p	GTCTCCAACCTTGTACC
	mmu-miR-192-5p	GGCTGACCTATGAATTGACAGC
	mmu-let-7a-5p	GGTGAGGTAGTAGGTTGTATAGTT
	mmu-let-7d-5d	CCAGAGGTAGTAGGTTGCATAG
	mmu-miR-200b-3p	GGTAATACTGCCTGGTAATGATG
	mmu-miR-146a-5p	GGTGAGAACTGAATTCATGGG
	mmu-miR-151-3p	TGCTAGACTGAAGCTCCTTGA
	mmu-miR-532-5p	TGCATGCCTTGAGTGTAGGA
mmu-miR-103a-3p	GAGCAGCATTGTACAGGGC	
Universal reverse primer	CAGTGCAGGGTCCGAGGT	
Universal double-quenched probe	56-FAM/CAGAGCCAC/ZEN/CTGGGCAATTT/3IABkFQ	

Table S3. Primers and probe used for quantification of serum exosomal miRNA candidates for grading liver fibrosis in a human cohort from a schistosomiasis endemic area.

	Target miRNA	Sequence (5'-3')
RT primer pool	Hsa-miR-150-5p	CAGTGCAGGGTCCGAGGTCAGAGCCACCTGGGCAATTTTTTTTTTCACTGG
	Hsa-miR-92a-3p	CAGTGCAGGGTCCGAGGTCAGAGCCACCTGGGCAATTTTTTTTTTACAGGC
	Hsa-miR-let-7a-5p/let-7d-5p	CAGTGCAGGGTCCGAGGTCAGAGCCACCTGGGCAATTTTTTTTTTAACYAT
	Hsa-miR-200b-3p	CAGTGCAGGGTCCGAGGTCAGAGCCACCTGGGCAATTTTTTTTTTCATCAT
	Has-miR-146a-5p	CAGTGCAGGGTCCGAGGTCAGAGCCACCTGGGCAATTTTTTTTTTAACCCA
	Hsa-miR-181a-5p	CAGTGCAGGGTCCGAGGTCAGAGCCACCTGGGCAATTTTTTTTTTACTCAC
	Hsa-miR-103a-3p	CAGTGCAGGGTCCGAGGTCAGAGCCACCTGGGCAATTTTTTTTTTCATAGC
	Hsa-miR-425-5p	CAGTGCAGGGTCCGAGGTCAGAGCCACCTGGGCAATTTTTTTTTTCAACGG
	Hsa-miR-191	CAGTGCAGGGTCCGAGGTCAGAGCCACCTGGGCAATTTTTTTTTTCAGCTG
Forward primers	Hsa-miR-150-5p	GTCTCCAACCCTTGTACC
	Hsa-miR-92a-3p	GGTATTGCACTTGTCCCGG
	Hsa-let-7a-5p	GGTGAGGTAGTAGTTGTATAGTT
	Has-let-7d-5d	CCAGAGGTAGTAGTTGCATAG
	Has-miR-200b-3p	GGTAATACTGCCTGGTAATGATG
	Has-miR-146a-5p	GGTGAGAACTGAATCCATGGG
	Hsa-miR-181a-5p	GAACATTCAACGCTGTCCG
	Hsa-miR-103a-3p	GAGCAGCATTGTACAGGGC
	Hsa-miR-425-5p	GAATGACACGATCACTCCCG
	Hsa-miR-191	GCAACGGAATCCCAAAGC
Universal reverse primer	CAGTGCAGGGTCCGAGGT	
Universal double-quenched probe	56-FAM/CAGAGCCAC/ZEN/CTGGGCAATTT/3IABkFQ	