

附表 1 miRNAs 引物序列

Supplementary table 1 miRNAs primers sequence information

引物名称	引物序列 (5'-3')
Primer name	Primer sequence (5'-3')
U6	F: AGAGAAGATTAGCATGGCCCCTG
	R: ATCCAGTGCAGGGTCCGAGG
	RT: GTCGTATCCAGTGCAGGGTCCGAGGTATTCGCACTGGATACGACAAAATA
通用	R: GTGCAGGGTCCGAGGT
miR-128-1	F: CGGGGCCGTAGCACTGT
	RT: GTCGTATCCAGTGCAGGGTCCGAGGTATTCGCACTGGATACGATCTCAG
miR-148a	F: TCAGTGCCTACAGAA
	RT: GTCGTATCCAGTGCAGGGTCCGAGGTATTCGCACTGGATACGA ACAAAG
miR-148b	F: GAAGTTCTGTTATACT
	RT: GTCGTATCCAGTGCAGGGTCCGAGGTATTCGCACTGGATACGA AGCCTG
miR-140	F: TACCACAGGGTAGAA
	RT: GTCGTATCCAGTGCAGGGTCCGAGGTATTCGCACTGGATACGACCGTGG
miR-193b	F: CGGGGTTTTGAGGGCG
	RT: GTCGTATCCAGTGCAGGGTCCGAGGTATTCGCACTGGATACGAT CATC
miR-130b	F: CAGTGCAATGATGAAA
	RT: GTCGTATCCAGTGCAGGGTCCGAGGTATTCGCACTGGATACGA ATGCC
miR-301b	F: CAGTGCAATGGTATT
	RT: GTCGTATCCAGTGCAGGGTCCGAGGTATTCGCACTGGATACGAT TTGAC

附表 2 RT-qPCR 引物序列

Supplementary table 2 RT-qPCR primers sequence information

引物名称	引物序列 (5'-3')
Primer name	Primer sequence (5'-3')
<i>SCD-1</i>	F: GGATGCTCGTGCCAGTG
	R: ACTCAGTGCCAGGTTAGAAG
<i>SREBF1</i>	F: TTGTGGAGCTCAAAGACCTG
	R: TGCAAGAAGCGGATGTAGTC
<i>PPAR<math>\gamma</math></i>	F: GGCTGTTTCGTTGCTTTTCATG
	R: ACTCAATCACTCCCTGGTCTTCAG
<i>FOXO1</i>	F: TGTCAGGCTAAGAGTTAGTGAGCA
	R: GGGTGAAGGGCATCTTTG
<i>LDLR</i>	F: ATTGGGTTGATTCCAAACTCC
	R: ATTCACATCTGAACCCGTGAG
<i>FASN</i>	F: CGGAAACTTCAGGAAATGTCC

<i>SREBP1C</i>	R: TCAGAGACGTGTCACTCCTGG
	F: GCATGCCATGGGCAAGTAC
	R: CCACATAGATCTCTGCCAGTGTG

附表 3 小鼠血脂水平  
Supplementary table 3 The blood lipid-related components in mice

单位: mg/dL

组别	总胆固醇含量	甘油三酯含量	高密度脂蛋白胆固醇含量	低密度脂蛋白胆固醇含量
Group	Total cholesterol content	Triglyceride content	High density lipoprotein cholesterol content	Low density lipoprotein cholesterol content
空白对照组	149.17±21.14 <sup>b</sup>	52.57±2.10 <sup>b</sup>	196.24±8.11 <sup>b</sup>	21.09±7.15 <sup>b</sup>
模型组	262.16±16.34 <sup>a</sup>	58.45±3.53 <sup>a</sup>	124.07±14.18 <sup>a</sup>	49.77±6.22 <sup>a</sup>

附表 4 miR-148a-3p 在不同物种中的序列  
Supplementary table 4 miR-148a-3p sequences of different species

物种名称	索引登记号	序列 (5'-3')
Species name	Accession number	Sequence (5'-3')
人	MIMAT0000243	UCAGUGCACUACAGAACUUUGU
泛穴居人	MIMAT00008041	UCAGUGCACUACAGAACUUUGU
猕猴	MIMAT0006208	UCAGUGCACUACAGAACUUUGU
大猩猩	MIMAT0024141	UCAGUGCACUACAGAACUUUG
小鼠	MIMAT0000516	UCAGUGCACUACAGAACUUUGU
褐家鼠	MIMAT0035725	UCAGUGCACUACAGAACUUUG
牛	MIMAT0003522	UCAGUGCACUACAGAACUUUGU
家犬	MIMAT0006622	UCAGUGCACUACAGAACUUUGU
山羊	MIMAT0035977	UCAGUGCACUACAGAACUUUGU

A

	Predicted consequential pairing of target region (top) and miRNA (bottom)	Site type	Predicted relative $K_D$	Context++ score	Context++ score percentile	Weighted context++ score	Conserved branch length	$P_{CT}$
Position 853-860 of <i>LDLR</i> 3' UTR mmu-miR-148a-3p	5' ...UUUGUACUCCUAGGU <b>UGCACUGA</b> ... 3' UGUUUCAAG <b>ACAUCAC</b> GUGACU	8mer	-5.421	-0.10	71	-0.10	0	< 0.1

B

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dataset: 1
Target: NM_010700.3:2791-4549
length: 1759
MiRNA: mmu-miR-148a-3p
length: 22

mfe: -22.9 kcal/mol
p-value: undefined

Position: 843
target 5' U UCCU GCA ACCC A 3'
      AC AGGUU CUG UGGUCAUUGG
      UG UUCA A GAC AUCACGUGACU
miRNA 3' U 5'
  
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A: TargetScan 数据库靶点预测结果; B: RNAhybrid 数据库靶点预测结果

A: Target prediction results by TargetScan database. B: Target prediction results by RNAhybrid database

附图 1 miR-148a-3p 的靶基因预测

Supplementary fig. 1 Prediction of target genes for miR-148a-3p