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Supplemental Information

Identification of ncRNA-Mediated

Functions of Nucleus-Localized

miR-320 in Cardiomyocytes

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Supplemental Table 1. Primers.

Gene	Forward (5'-3')	Reverse (5'-3')
h-pbk	GTGTTTTAAGTCAGCATGAGCA	AAGCACTTGGAATTGTACTIONGGG
h-SMCHD1	TTTCCTTTGGAAGAAGAAACCA	TTGAGCAAATACTGAGGTTTCATG
h-cep57	TACATAGAAAGAGAGCCCAAG	CAAACAAGGAGATAACAGGAG
h-micall2	AGTACAAGTCCGGGTTCCG	TCCGCTTGTCCAAGATCTG
h-sorbs3	TTTACATTCTCTTCCAGAGGGG	TATCACCCCGCACTGTGG
h-cnksr1	TTTATTTGGTTGGAAAGTAGCCC	TCCCCTGGATTCTGTTCAGG
h-rnf207	TGCTATCAACGGAAGTCG	GGGAAGTTCCACACAGTAATC
h-Mrpl54	CTCAAGGACCCCGACGTATG	ACTCAGCATCCGGTTTCAGG
h-mex3a	TCTCCTCTGTGTTGGTCGC	CTCCACTCTTTACCCACAAAGG
h-fscn2	CAGCCACACAAGTTTCTGCC	AACTCTTCGTCCTTGCCTGG
h-ptgir	AAATAACCAGTGGCCTGGC	TTGGGCCTCCTAAGTGGAC
h-vps37d	CCTGCTTCAGGATGAGCCCAA	GGTATTTGATGGCCAGGGCAG
h-ACTB	AGCGAGCATCCCCAAAGTT	GGGCACGAAGGCTCATCATT
r-cep57-promoter	TCTGTCCCGGAAAGTGAAGC	GTCCTTAGTGGATGCGGAGG
r-fscn2-promoter	CAGAGGGTGAGGTAGGTCCA	TACATGTGCGTGGGTCACAA
U6	CTCGCTTCGGCAGCACA	AACGCTTCACGAATTTGCGT
miR-320	GCAGAGAAAAGCTGGGTTGAG	CCAGTGCAGGGTCCGAGGTA

r-pbk	CCGAGTGTGTGACTGTGGAC	AATGGGACAACCCTCTCGGA
r-SMCHD1	CTGGTCCCCCTCATCGACTA	CACCGAGGAACTTACAGGGG
r-cep57	CTTTGGTGCACAGCCACATT	AGGCGCCACTGACTTCTTAC
r-micall2	CTGCGAATAGCAAAGCGACC	GCACAGATAGATGAGCGCCT
r-sorbs3	CAAGCAGCAAGGACGTGAAC	TTGGAGGACACAGGATGTGC
r-cnksr1	TACCCGGTGGTTTTATGGGC	AGGGCTTGTACACATCGTGG
r-rnf207	CGCGGATCGCTTCTGAGTAT	CATACAGGTTCTGCCGATGC
r-Mrpl54	TAGAACCGGAGTCCCGAGAG	TGCCGCAGGTCCCTTTATTT
r-mex3a	GCCTAGTCTAGTGCTCTGCG	GTCTTGGCTCTCAGTGCCTT
r-fscn2	TGGAGGTGGGTTCTGGTACA	GGAAATCCTCCGCCAAGTCA
r-ptgir	GGGGAACCTGGGAGTTGACTG	GCAAGAACCTGCCATACCCT
r-vps37d	GGACTTCGGTCACCAAGGAA	AGTTAGCCTTGGCGGTTGTT
r-ACTB	CACCCGCGAGTACAACCTTC	CCCATAACCACCATCACACC
m-cep57-promoter	GGCTCGCCCATATAATGCC	TTGTACGCCTGCACCAAGT
m-fscn2-promoter	GTAAAAGCCACAGGCCAAGC	GGGCATGATGCTCTTCCCTT
h-cep57-promoter	AGGGGGTTGCTGTTTAGCTG	GTTGGGAGGAGCCATCGAAT
h-fscn2-promoter	AGGCAGCACCCCTAGCTTGTA	CAGTTTCCAGGGGACTGAGG
m-cep57	GGGCAGCAGAGTTACAGAGT	TGCACAGGGCTTTACTGTGG
m-fscn2	TGGGAGCCAAGGGTCAGATA	AGACCGTTGGTTGGCATCTT

ChIRP-probe 1 (m-cep57)	ctggaaggcgtctatcaaga-biotin
ChIRP-probe 2 (m-cep57)	cgctctcagagcgcgaaatc-biotin
ChIRP-probe 3 (m-cep57)	agtcaagtgctgaaatgtc-biotin
ChIRP-probe 1 (m-fscn2)	gagagtcagcaggggaacata-biotin
ChIRP-probe 2 (m-fscn2)	aggaaaggatgactggggtc-biotin
ChIRP-probe 3 (m-fscn2)	gaaggactagactctcaggg-biotin
ChIRP-probe 1 (control)	tagccagctttcatcaacat-biotin
ChIRP-probe 2 (control)	agcagcagaccatttcaat-biotin
ChIRP-probe 3 (control)	gtgtgggccataattcaatt-biotin

siRNAs to promoter RNAs

siRNA cocktail designed by Riobio Co., Ltd (Guangzhou, China)

h, human; r, rat; m, mouse

Supplemental Table 2. Function of promoter ncRNAs (literature review).

Promoter ncRNAs	Sense/Antisense	Effects on downstream gene	References
Cox-2 promoter RNA	Sense	Activation	Nucleic Acids Res. 2013;41:10086
Fbp1 precursor ncRNAs	Sense	Activation	Nature. 2008;456:130
Dsx1-promoter ncRNA	Sense	Activation	Curr Biol. 2018;28:1811
CCND1 promoter RNA	Antisense	Repression	Nature. 2008;454:126
CMV promoter RNA	Antisense	Repression	RNA. 2014;20:1916
PHO5 promoter RNA	Antisense	Activation	Proc Natl Acad Sci USA. 2007;104:8011
DLX5/6 promoter RNA	Antisense	Activation	Genes Dev. 2006;20:1470
HOXA Antisense RNA (HOTTIP)	Antisense	Activation	Nature. 2011;472:120
FLO11-promoter RNA ICR1 and PWR1	Sense/Antisense	Repression/Activation	Proc Natl Acad Sci USA. 2009;106:18321
SAP30L-AS1	Antisense	Repression	Gene. 2018;690:120
ILF3-AS1	Antisense	Activation	Cancer Manag Res. 2018;10:6791
FZD6-promoter ncRNA	Antisense	Activation	Oncogene. 2018;37:3098
SMN-AS1	Antisense	Repression	Neuron. 2017;93:66