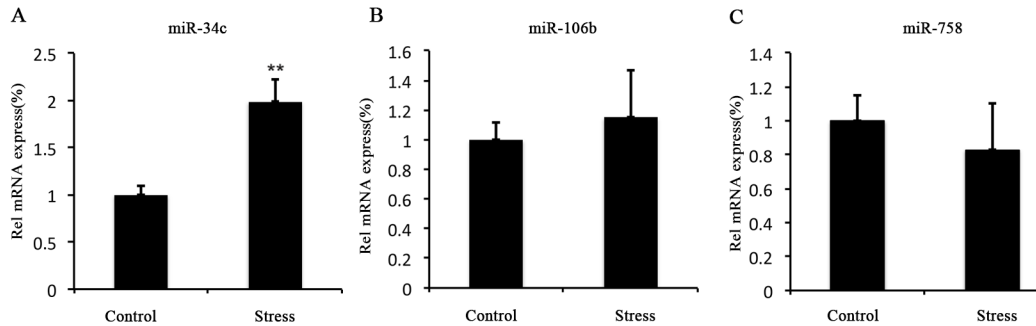
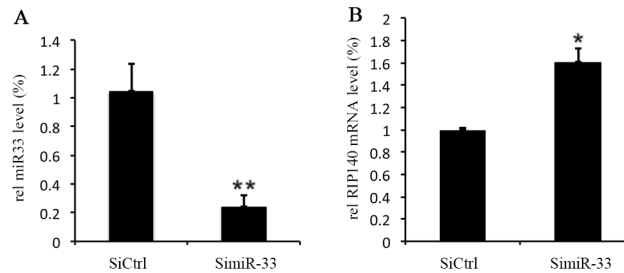


## Supplemental material



**Supplemental Figure1.** Changes of different microRNAs, miR-34c, miR106b and miR758 in the mouse hippocampus CA1 of unstressed (control) stressed animals (stress). The statistic results are presented as means  $\pm$  SEM., (n=5), \*\* $p$ <0.01 compare to control group determined by student  $t$ -test.



**Supplemental Figure2.** Expression of miR-33 level(A) and RIP140 mRNA level(B) in mouse hippocampus CA1 injected with siRNA of miR-33(SimiR-33) or scramble RNA(SiCtrl) detected by qPCR. The statistic results are presented as means  $\pm$  SEM., (n=5), \* $p$ <0.05 and \*\* $p$ <0.01 compare to control group determined by student  $t$ -test.

### Supplemental table1. Primers list

Name	Sequence
Lrp1	5'-GAGTGTTCCTGTATGGCAC-3'
	5'-GATGCCTTGGATGATGGTC-3'
ldlr	5'-CTGTTCCACCTCTGTTTAC-3'
	5'-AGTGAGATACGGCGAATAGA-3'
hmgcr	5'-CTTGTGGAATGCCTTGTGATTG-3'
	5'-AGCCGAAGCAGCACATGAT-3'
Srebp1	5'-GGCCGAGATGTGCCGA-3'
	5'-TTGTTGATGAGCTGGAGCATGT-3'

Supplemental table 2

	Recordings(% of control)					Average	sub-groups
Animals(FST)	Rec 1	Rec 2	Rec 3	Rec 4	Rec 5	(% of unstressed behavior)	
Cage1							
1	3.37	22.47	8.42	4.31	11.32	9.978	S-UR
2	39.47	43.29	37.43	59.83	25.67	41.138	S-R
3	44.46	33.42	38.43	32.43	41.42	38.032	S-R
4	36.4	47.24	35.42	44.24	33.43	39.346	S-R
Cage2							
1	33.47	31.22	27.42	48.32	44.32	36.95	S-R
2	8.34	6.42	11.34	1.45	7.31	6.972	S-UR
3	2.42	2.32	15.34	11.48	4.42	7.196	S-UR
4	17.34	19.31	36.32	19.32	48.54	28.166	Excluded
Cage3							
1	9.32	21.34	3.32	12.32	2.42	9.744	S-UR
2	6.32	13.43	14.64	2.42	12.32	9.826	S-UR
3	46.23	53.42	41.32	52.42	44.23	47.524	S-R
4	11.32	31.42	12.42	24.53	17.42	19.422	Excluded