

Table S1 Primers designed for qRT-PCR to validate the lncRNA candidates

Gene	Forward primer (5'→3')	Reverse primer (5'→3')
β-actin (M)	GCTCCTTCGTTGCCGGTCCA	TTGCACATGCCGGAGCCGTT
Gm14832 (M)	CTCAGCCAGTAAGTCCAGCCTACC	CCGGAGCACCGTTGAGACTCTC
GAS5 (M)	ACTCTTGACAGCTGGGGTGA	GGGACCACATGCACACACAA
Trib3 (M)	CTCCAGGACAAGGAAGAAACCG	CTCCAGGACAAGGAAGAAACCG
AK086021 (M)	TCAGGAGAAGCAGCAATGCAGTTC	AGCCACTAGGAAGGATGGTGTAGC
Gm10497 (M)	TCTCCTTCGCCGCCGTCTAG	TTGAGGCTGGTCGGAGACACC
Ccdc104 (M)	TGTACAGCCACCCTCAGGTA	CACGTTCTGGAGCATAGCATTC

LncRNAs and qRT-PCR represent long noncoding RNAs and quantitative real-time polymerase chain reaction respectively.

Table S2 The mRNAs correlated with the six identified lncRNAs in TNF and PI3K-Akt signaling pathways

LncRNAs	Signaling pathways	Numbers	mRNAs
Gm14832	TNF	27	Atf4, Birc3, Ccl12, Ccl2, Ccl120, Cebpb, Creb1, Creb3l1, Csf1, Csf2, Cxcl1, Cxcl10, Cxcl2, Edn1, Icam1, Ifi47, Il6, Irf1, Jun, Junb, Map3k8, Mlkl, Pik3r1, Ripk1, Rps6ka5, Socs3, Tnfrsf1b
	PI3K-Akt	5	Efna2, Epor, Pik3r1, Rbl2, Ywhaq
GAS5	TNF	7	Atf4, Creb3, Csf1, Jun, Pik3r1, Tnfrsf1a, Tnfrsf1b
	PI3K-Akt	2	Fgf1, Pik3r1
Trib3	TNF	27	Atf4, Birc3, Ccl12, Ccl2, Ccl120, Cebpb, Creb1, Creb3l1, Csf1, Csf2, Cxcl1, Cxcl10, Cxcl2, Cxcl3, Il6, Irf1, Map3k8, Mapk10, Mapk12, Mapk14, Mlkl, Mmp9, Pik3r1, Rela, Ripk3, Socs3, Tnfrsf1b
	PI3K-Akt	10	Efna2, Epor, Fgf16, Myc, Pik3r1, Pkn1, Rps6kb2, Thbs2, Vtn, Ywhaq
AK086021	TNF	22	Birc3, Ccl12, Ccl2, Cebpb, Creb3l1, Csf1, Csf2, Cxcl1, Cxcl10, Cxcl2, Icam1, Ifi47, Il1b, Il6, Irf1, Junb, Map3k8, Mlkl, Pik3r1, Ripk1, Socs3, Tnfrsf1b
	PI3K-Akt	5	Efna2, Pik3r1, Rps6kb2, Thbs2, Vtn
Gm10497	TNF	5	Fas, Map2k7, Mapk10, Mapk14, Rps6ka5
	PI3K-Akt	2	Pkn1, Rbl2
Ccdc104	TNF	19	Atf4, Ccl2, Cebpb, Creb3l1, Csf1, Cxcl1, Cxcl10, Cxcl2, Cxcl3, Il6, Map2k4, Map3k8, Mapk12, Mapk14, Mmp9, Rela, Ripk1, Socs3, Tnfrsf1b
	PI3K-Akt	7	Efna2, Epor, Fgf16, Rps6kb2, Thbs2, Vtn, Ywhaq

LncRNAs, TNF, PI3K-Akt and mRNAs represent long noncoding RNAs, tumor necrosis factor, phosphatidylinositol-3-kinase/protein kinase B signaling pathways and messenger RNAs respectively.

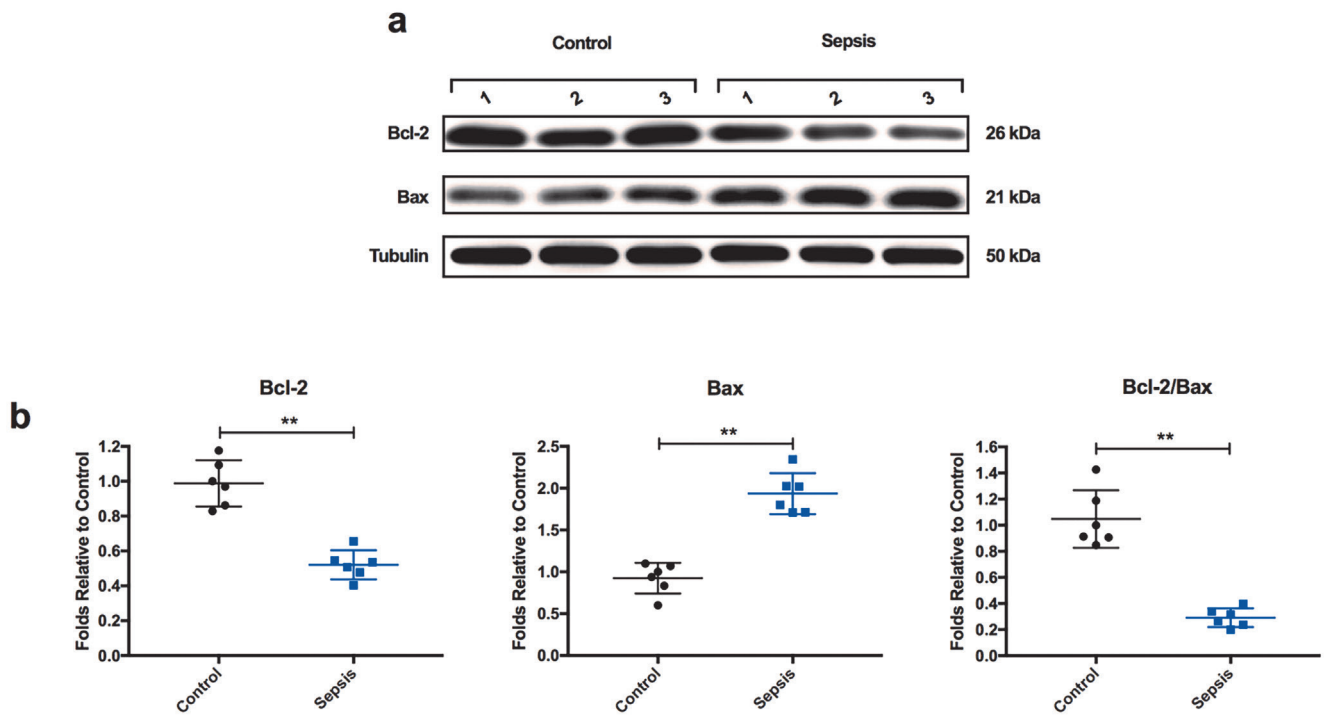


Figure S1 The expression levels of apoptosis-related proteins in myocardial tissue. (A) The protein levels of Bcl-2 and Bax were detected by Western blotting. (B) The relative protein levels of Bcl-2 and Bax were determined after normalization to tubulin. The ratio of Bcl-2 to Bax was calculated with the relative protein levels.

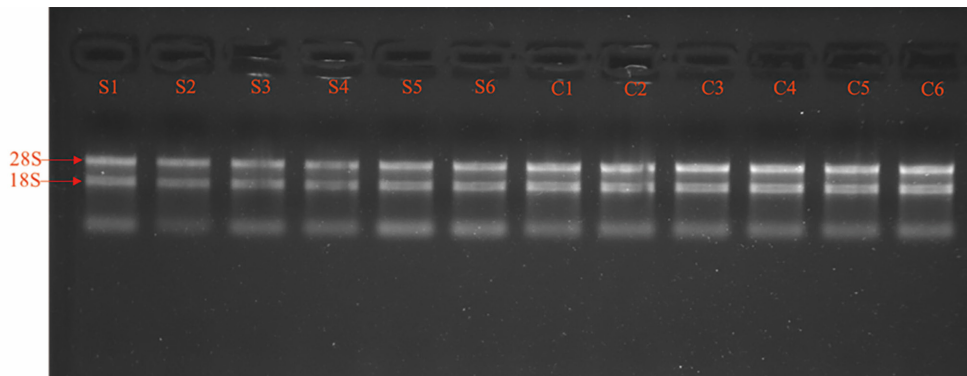


Figure S2 RNA integrity and gDNA contamination test by denaturing agarose gel electrophoresis. S and C represent sepsis and control groups respectively.

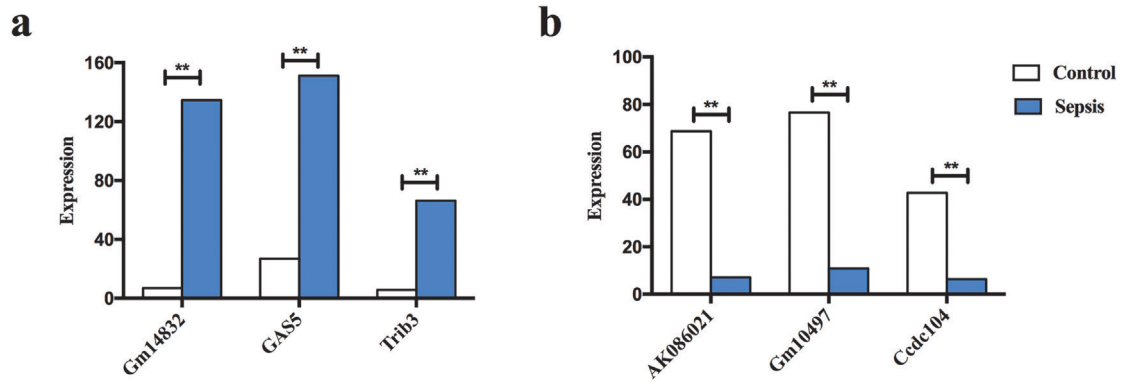


Figure S3 The expression levels of lncRNA Gm14832, GAS5 and Trib3 (A, up-regulation) and lncRNA AK086021, Gm10497 and Ccdc104 (B, down-regulation) in microarray analysis.