

Myocyte-specific enhancer factor 2C: a novel target gene of miR-214-3p in suppressing angiotensin II-induced cardiomyocyte hypertrophy

Chun-Mei Tang^{1,2,3*}, Fang-zhou Liu^{1,2*}, Jie-Ning Zhu^{1,2}, Yong-Heng Fu^{1,2}, Qiu-Xiong Lin^{1,2},
Chun-Yu Deng^{1,2}, Zhi-Qin Hu^{1,2,3}, Hui Yang^{1,2}, Xi-Long Zheng⁴, Jian-Ding Cheng⁵, Shu-Lin
Wu^{1,2} and Zhi-Xin Shan^{a,1,2}

¹ Guangdong Cardiovascular Institute, Guangdong Provincial Key Laboratory of Clinical Pharmacology, Guangzhou 510080, China

² Guangdong General Hospital, Guangdong Academy of Medical Sciences, Guangzhou 510080, China

³ Southern Medical University, Guangzhou 510515, China

⁴The Libin Cardiovascular Institute of Alberta, Department of Biochemistry & Molecular Biology, The University of Calgary, Calgary, Alberta, Canada T2N 1N4

⁵Department of Forensic Pathology, Zhongshan School of Medicine, Sun Yat-sen University, Guangzhou 510080, China

^aEmail: zhixinshan@aliyun.com

* These authors contributed equally to this work.

Supplementary

Table 1 Primers used in qRT-PCR assay

Gene	Sequence (5'- 3')	Product size (bp)
<i>MEF2C</i>	F, GGTAACACAGGCGGTCTGAT R, ATAAGAACGCGGAGATCTGG	197
<i>GAPDH</i>	F, CAAGAAGGTGGTGAAGCAGG R, CCACCCTGTTGCTGTAGCC	200
Mature miR-214-3p	RT, GTCGTATCCAGTGC GTGTCGTGGAGT CGGCAATTGCACTGGATACGACTGCCTG F, GTCCGCACAGCAGGCACAGACAGGCAGT R, GTGCGTGTCGTGGAGTC	76
U6	RT, GTCGTATCCAGTGC GTGTCGTGGAGT CGGCAATTGCACTGGATACGAC F, GTCCGCGTGCTCGCTTCGGCAGC R, GTGCGTGTCGTGGAGTC	160

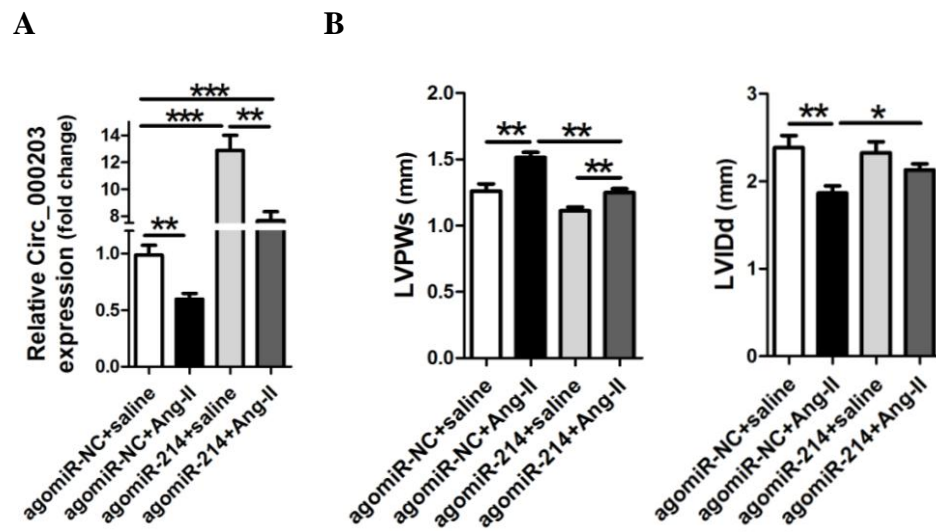


Figure 1 Determination of miR-214-3p in mouse myocardium and representative variables of echocardiograph assay in mice. A. Expression of miR-214-3p in mouse myocardium. B. The variables of echocardiograph assay, LVPWs and LVIDd, in mice.

Data are shown as mean \pm sem, * p <0.05, ** p <0.01, *** p <0.001. N=6.