Clinical SCIENCE

www.clinsci.org

Clinical Science (2010) **119**, 273–282 (Printed in Great Britain) doi:10.1042/CS20100084

online data

SUPPLEMENTARY ONLINE DATA

Angiotensin II and the ERK pathway mediate the induction of myocardin by hypoxia in cultured rat neonatal cardiomyocytes

Chiung-Zuan CHIU*†‡, Bao-Wei WANG‡, Tun-Hui CHUNG† and Kou-Gi SHYU*‡

*Graduate Institute of Clinical Medicine, College of Medicine, Taipei Medical University, Taipei, Taiwan, †School of Medicine, Fu-Jen Catholic University, Taipei County, Taiwan, and ‡Division of Cardiology, Shin-Kong Wu Ho-Su Memorial Hospital, Taipei, Taiwan

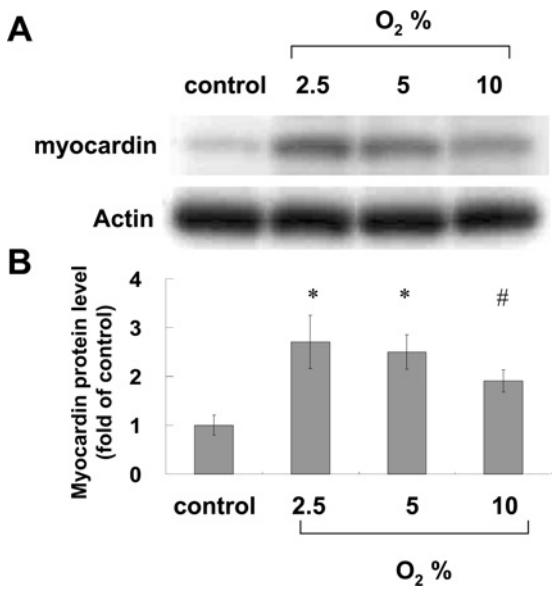

Figure S1 Hypoxia increases the expression of myocardin protein in cultured rat neonatal cardiomyocytes

Neonatal cardiomyocytes were subjected to normoxia or different degrees of hypoxia for 4 h, and total cell lysates were immunoblotted with the anti-myocardin antibody. Actin is used to show equal amounts of protein loading in each lane. $^{\#}P < 0.05$ and $^{*}P < 0.01$ compared with normoxia control ($n = 3$).

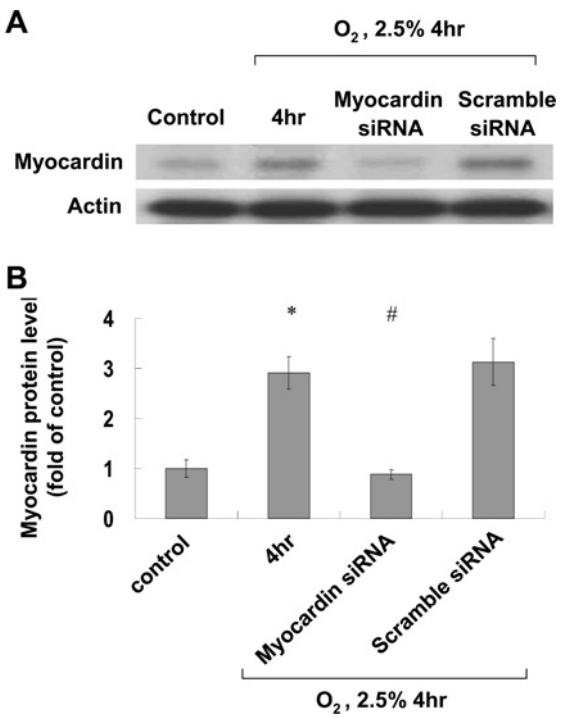

Figure S2 Effect of myocardin siRNA on myocardin expression in cardiomyocytes under 2.5 % O_2

Myocardin protein levels increased and reached a peak after hypoxia for 4 h, which was suppressed by myocardin siRNA. Actin is used to show for equal amounts of protein loading in each lane. $^{*}P < 0.01$ compared with normoxia control; $^{\#}P < 0.01$ compared with 4 h ($n = 3$).

Correspondence: Professor Kou-Gi Shyu (email m004401@yahoo.com.tw).

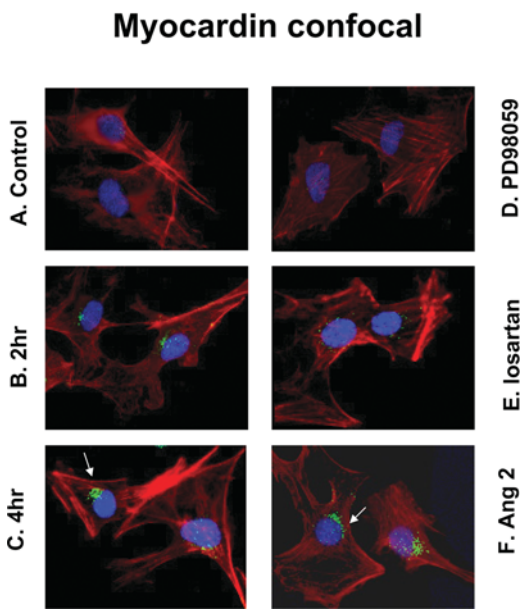

Figure S3 **Confocal microscopy identifies the expression of myocardin in the nucleus of neonatal cardiomyocytes after hypoxia**

(A) Cardiomyocytes under normoxia. (B and C) Myocardin protein (green) levels increased in the nucleus (blue) of neonatal cardiomyocytes from 2 to 4 h. (D and E) ERK pathway inhibitor (PD98059) and ARB (losartan) suppressed the expression of myocardin. (F) AngII increased the expression of myocardin in the nuclei of neonatal cardiomyocytes.

Received 4 February 2010/5 May 2010; accepted 6 May 2010
Published as Immediate Publication 6 May 2010, doi:10.1042/CS20100084