

SUPPLEMENTAL MATERIAL

Supplemental Figure legends

Supplemental Figure 1. The effect of I/R injury on acetyl-CoA production. Quantification of acetyl-CoA levels in sham and I/R rat hearts. n=3, **P < 0.05 vs Sham group.

Supplemental Figure 2. Anti-oxidant activity of myocardium after I/R injury. Quantification of myocardial SOD activity after I/R with or without I/R. n=3, *P < 0.05 vs Sham group; #P < 0.05 vs I/R group.

Supplemental Figure 3. Knockdown of MCAD is required for alleviating ROS accumulation.

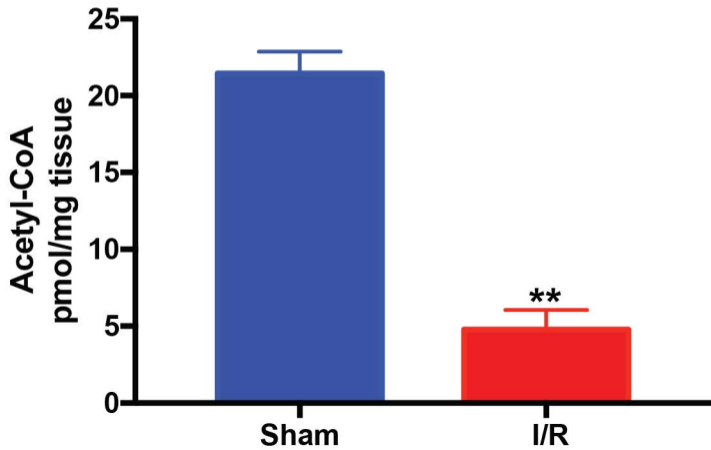
(A) Western blot showed knockdown of MCAD by adenovirus shRNA. (B) Cell viability measurement in NRVM at shown condition using CCK8 detection kit. (C) NRVM cellular ROS levels are indicated by DHE staining after sI/R treatment. n=3, *p<0.05, **p<0.01, vs Normoxia+PBS+shCTL; ##p<0.01 vs sI/R+PBS+shCTL.

Supplemental Figure 4. Knockdown of Kat2a is required for alleviating ROS accumulation.

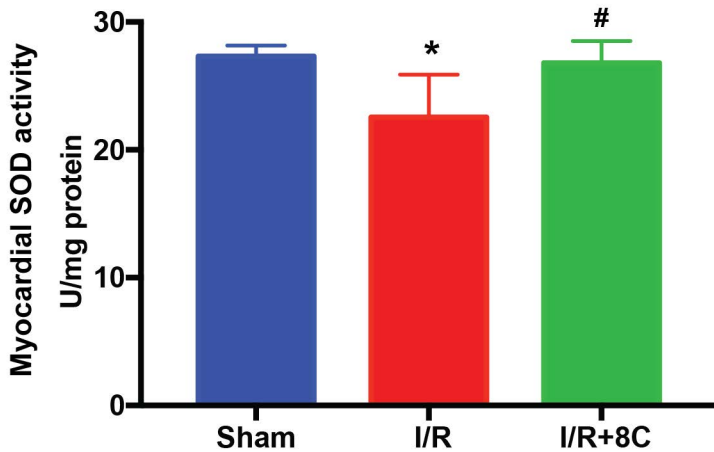
(A) Western blot showed knockdown of Kat2a by adenovirus sh-RNA. (B) Cell viability measurement in NRVM at indicated condition using CCK8 detection kit. (C) NRVM cellular ROS levels are indicated by DHE staining after sI/R treatment. Scale bar: 200µm. n=3, **p<0.01, vs Normoxia+PBS+shCTL; # p<0.05, ##p<0.01 vs sI/R+PBS+shCTL.

Supplemental Figure 5. 9C leads to accumulation of succinate during I/R. Quantification of Succinate levels in rat hearts after I/R with saline, 8C or 9C treatment. Scale bar: 200µm. n=3, *P < 0.05 vs Sham group; #P < 0.05 vs I/R group.

Supplemental Figure 1

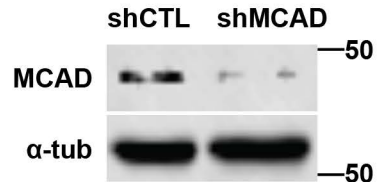


Supplemental Figure 2

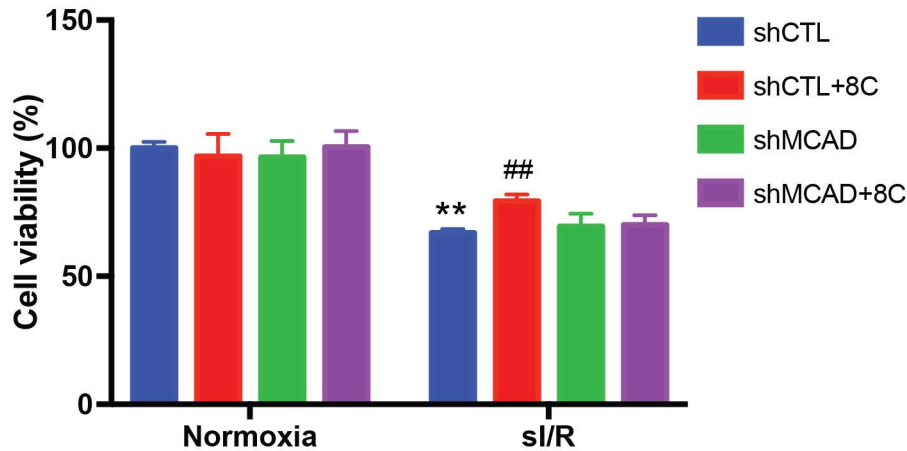


Supplemental Figure 3

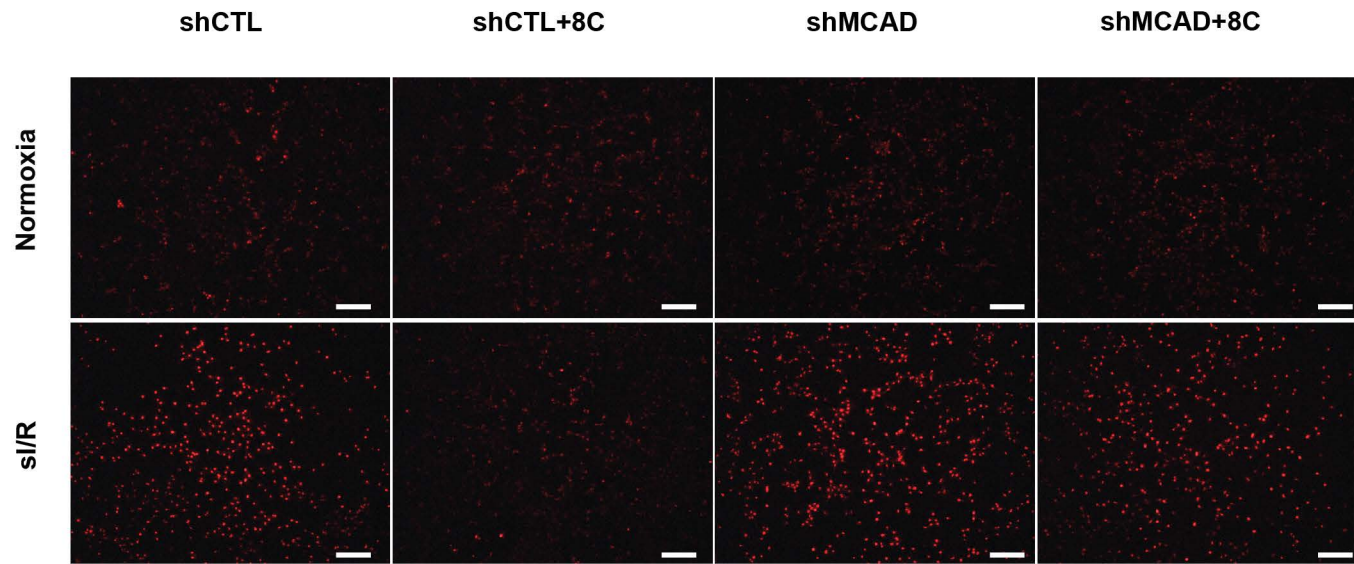
A



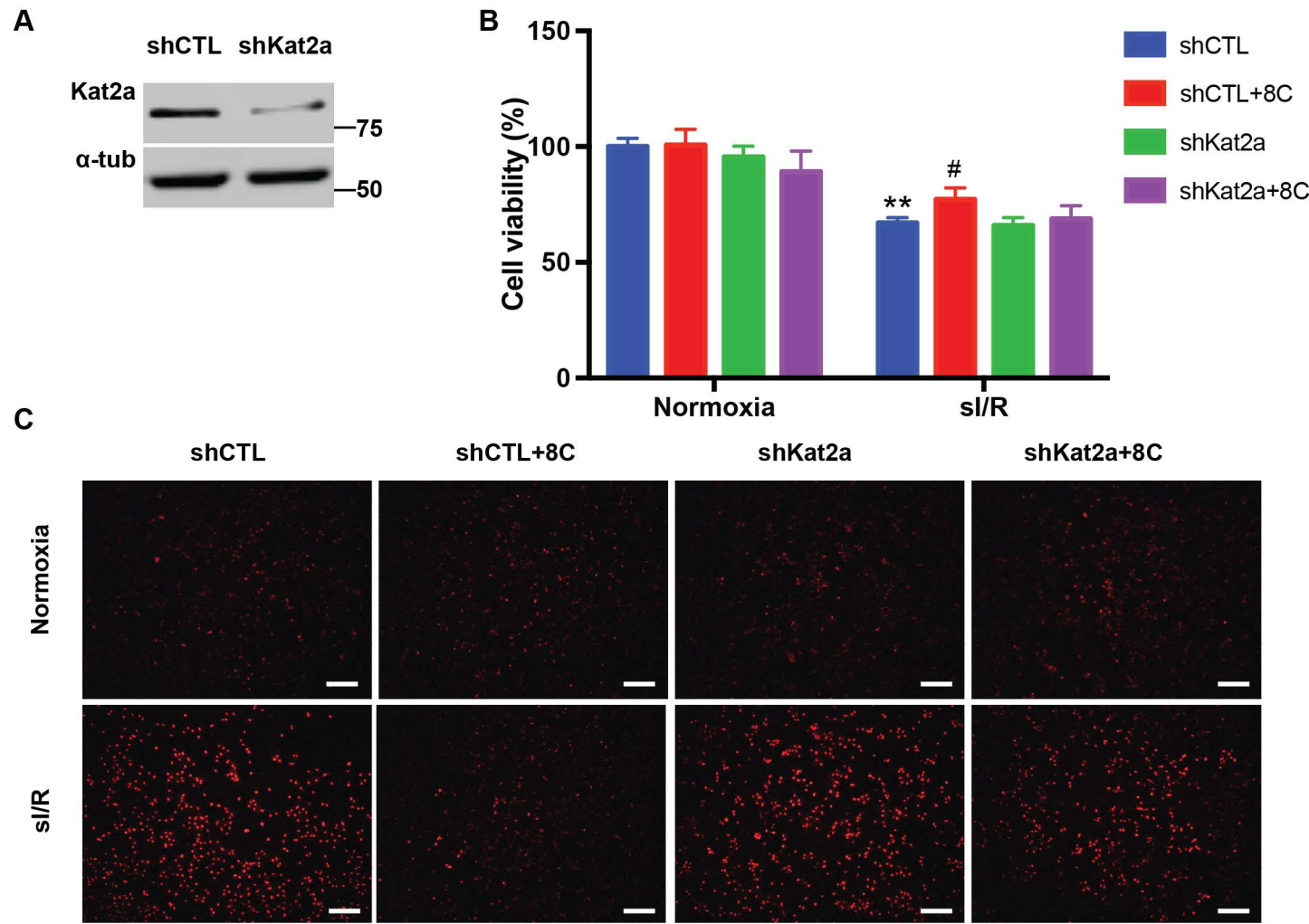
B



C



Supplemental Figure 4



Supplemental Figure 5

Succinate concentration after I/R

