**Restoration of Sestrin 3 expression mitigates cardiac oxidative damage in the Ischemia-Reperfusion injury model**

Supplementary table 1. Antibodies used for western blot.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Antigen | Species | Manufacturer | Catalog Number | Dilution |
| SESN3 | Rabbit | Proteintech | 11431-2-AP | 1:5000 |
| PARP | Rabbit | abcam | ab191217 | 1:5000 |
| Caspase 9 | Mouse | Cell signaling | 9508 | 1:5000 |
| Bcl-XL | Rabbit | Cell signaling | 2764 | 1:2000 |
| TGF-β | Rabbit | Cell signaling | 3711 | 1:5000 |
| Fibronectin | Rabbit | Proteintech | 15613-1-AP | 1:5000 |
| SERCA2a | Rabbit | 21st Century Biochemicals | Custom made | 1:5000 |
| GFP | Rabbit | Santa Cruze | SC-8334 | 1:5000 |
| GAPDH | Rabbit | Cell signaling | 2118 | 1:5000 |

Supplementary table 2. Quantitative RT-PCR primer information

|  |  |  |
| --- | --- | --- |
| Gene |  | Sequence (5’to 3’) |
| pri-miR-25 | F | 5’-CTC ACA GGA CAG CTG AAC ACC- 3’ |
| R | 5’-CCC CCA CAT CTG CAG TGT TG- 3’ |
| pre-miR-25 | F | 5’-CAG TGT TGA GAG GCG GAG ACT- 3’ |
| R | 5’-GCA CTG TCA GAC CGA GAC AAG- 3’ |
| miR-25-3p | F | 5’-CAT TGC ACT TGT CTC GGT CTG A- 3’ |
| SESN 1 | F | 5’-GCA TGT TCC AAC ATT TCG TG- 3’ |
| R | 5’-TCC CAC ATC TGG ATA AAG GC- 3’ |
| SESN 2 | F | 5’-GAC CAT GGC TAC TCG CTG AT- 3’ |
| R | 5’-GCT GCC TGG AAC TTC TCA TC- 3’ |
| SESN 3 | F | 5’-CCA AGC AAA TAC GGC GGA TG- 3’ |
| R | 5’-TGT AGA ACT GGC TCC GCA AG- 3’ |
| 18S | F | 5’-TAA CGA ACG AGA CTC TGG CAT- 3’ |
| R | 5’-CGG ACA TCT AAG GGC ATC ACAG-3’ |
| U6 | F | 5’-CGC TTC ACG AAT TTG CGT GTC AT-3’ |
| R | 5’-GCT TCG GCA GCA CAT ATA CTA AAA T-3’ |

Supplementary figure 1. SESN3 expression following Pre miR-25 transfection in H9c2 cells

Immunofluorescence staining of SESN3 (red) and nuclei (blue) in H9c2 cells transfected with Pre miR-25.



Supplementary figure 2. SESN1, SESN2 mRNA expression in H9c2 cells under Normoxia and hypoxia/reoxygenation (H/R) conditions.

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