## **Supplemental Materials**

**Supplemental Table 1.** List of Abbreviations.

ALKBH5	alkB homolog 5
ceRNA	competitive endogenous RNA
cIAP1	cellular inhibitor of apoptosis protein 1
Dex	dexmedetomidine
FTO	fat mass and obesity-associated protein
$H_2O_2$	hydrogen peroxide
HNRNPC	heterogeneous nuclear ribonucleoprotein C
I/R	ischemia/reperfusion
lncRNA	long non-coding RNA
H/R	hypoxia/reperfusion
m <sup>6</sup> A	N6-methyladenosine
MI	myocardial infarction
METTL3	methyltransferase like 3
METTL14	methyltransferase like 14
NC	negative control
RIP	RNA-immunoprecipitation
WTAP	wilms tumor 1-associated protein
YTHDC1	YTH-B homology domain-containing 1
YTHDF1	YTH-B homology m <sup>6</sup> A-binding protein 1

Supplemental Table 2. Primers used for real-time PCR and siRNA sequences.

H19	F	5'-TAAAGCAGCTGGGGTGAG-3'
	R	5'-TGACTGGCAGGCACATCCAC-3'
GAPDH	F	5'-GCCAAAAGGGTCATCATCTC-3'
	R	5'-GGCCATCCACAGTCTTCT-3'
ALKBH5	F	5'-ATTCTCAGGAAGACAAGATTAG-3'
	R	5'-TTTTCTTCTTTGTCCATTTC-3'
METTL3	F	5"-ATGAAAGCCAGTGACGCT-3'
	R	5'-TGCCAGGACTCTCAGAATC-3'
METTL14	F	5'-AGACGCCTTCATCTCTTCGG-3'
	R	5'-AGCCTCTCAATTTCCTCGGT-3'
WTAP	F	5'-GTTATGGCACGGGATGAGTT-3'
	R	5'-ATCTCCTGTTCCTTGGTTGC-3'
FTO	F	5'-ATGAAAGCGATGACGAGTC-3'
	R	5'-AATCCAAGGTGCCTGTTG-3'
YTHDF1	F	5'-CCAATAATCAACTGCGGC-3'
	R	5'-AGTCGTCAAAGATGGAGGTT-3
YTHDC1	F	5'-TTCATAACATGGGACCACCG-3'
	R	5'-TCATAGTCATGTACTCGTTTATCTC-3'
HNRNPC	F	5'-CAAACGCCAGCGTGTCTCGG-3'
	R	5'-TGGGGATGAGAAGGACAAGT-3'

miR-29b-3p	F	5'-ACACTCCGGCTGGGTAGCACCATTTG-3'
U6	F	5'-CTCGCTTCGGCAGCACA-3'
	R	5'-AACGCTTCACGAATTTGCGT-3'
Н19	796	5'-GCAGGUGAGUCUCCUUCUUTT-3'
	1687	5'-GCUGCACUCAGAACCACUAT-3'
cIAP1	487	5'-ACUUAAUGGCCACAUACUGUA-3'
	962	5'-GCUAGAUAUCCUCAUCUUCTT-3'
ALKBH5	810	5'-GCCUCAGGACAUCAAAGAATT-3'
	1016	5'- GGAUCCUGGAAAUGGACAATT-3'

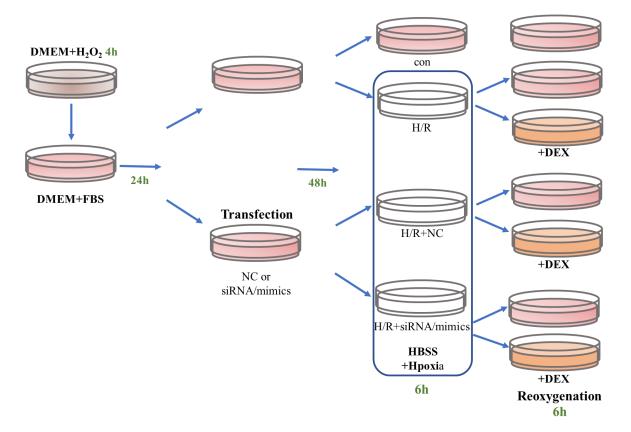


Figure S1. Experimental groupings and protocols. H<sub>2</sub>O<sub>2</sub> was added into DMEM for 4 h to induce the senescence of H9c2 cells. After 24 h, cells were transfected with NC or siRNA/mimics. The medium of the H/R group was changed to HBSS, and cells were kept in an incubator for 6 h of hypoxia. H/R and control groups were replaced with DMEM containing FBS, while Dex postconditioning groups were treated with different concentrations of Dex during 6-h reoxygenation.