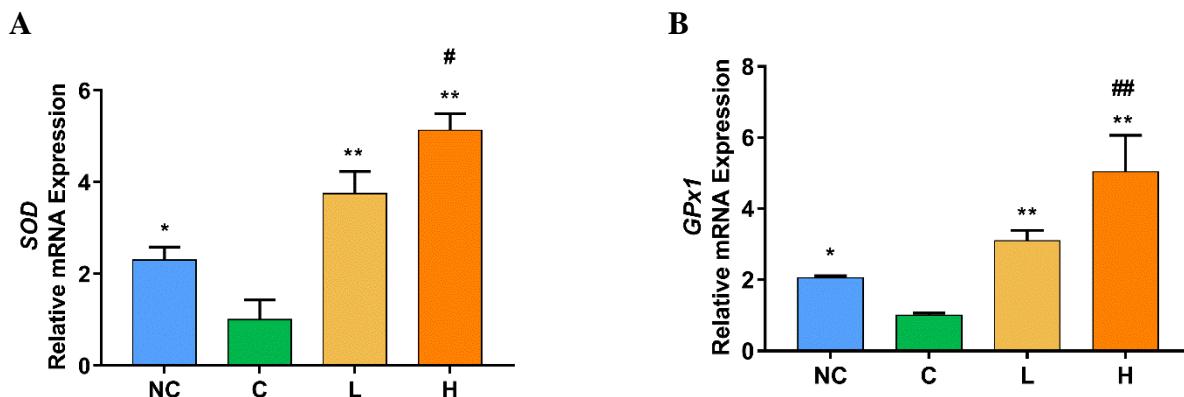


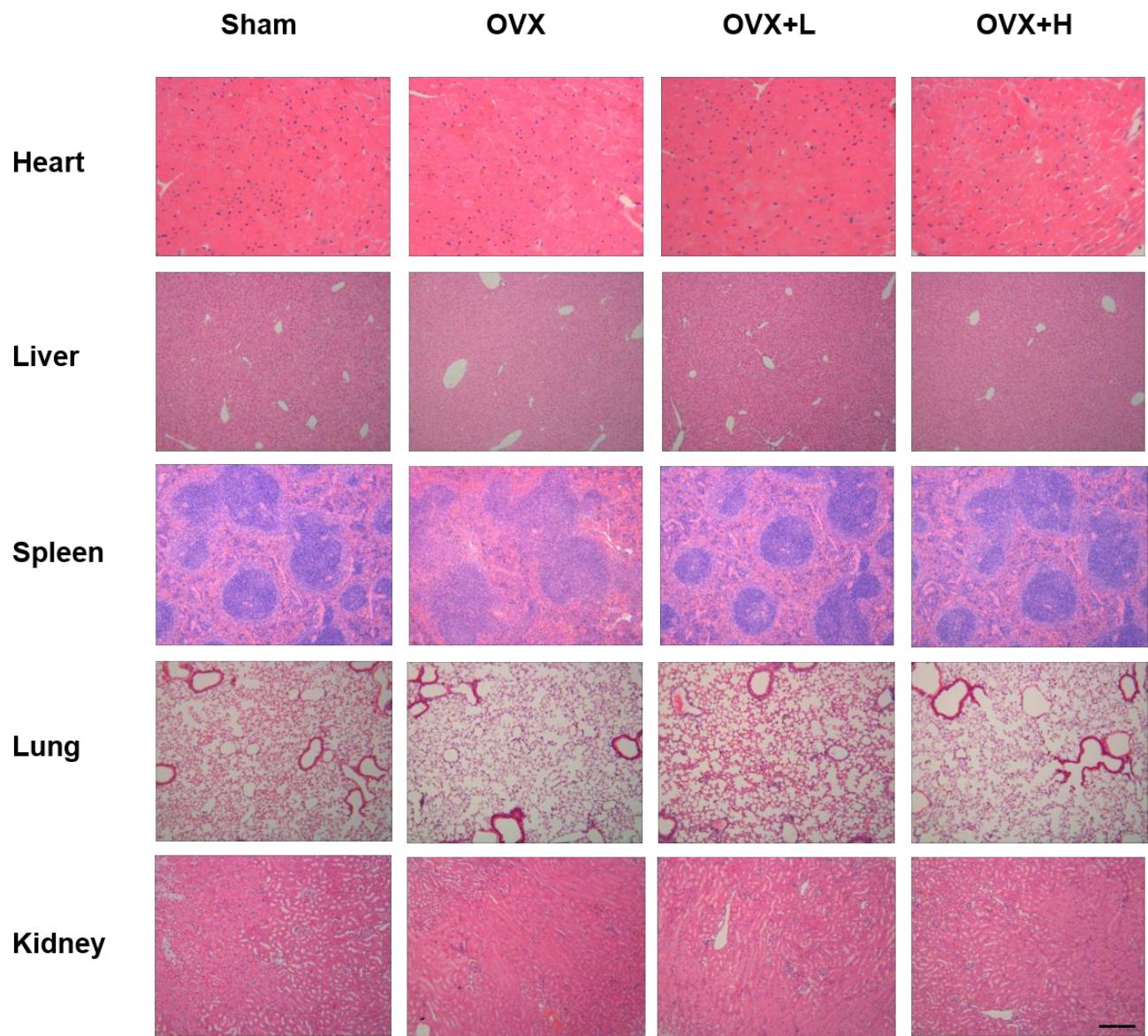
## *Supplementary Material*

**Table S1 Primer Sequences for RT-qPCR**

| <b>Gene</b> | <b>Sequence 5' to 3'</b>   |                            |
|-------------|----------------------------|----------------------------|
| GAPDH       | F: GGGAGCCCATCACCATCTT     | R: GCCTCACCCCATTTGATGTT    |
| TRAP        | F: ACGGCTACTTGCAGGTTCA     | R: TCCTGGGAGGCTGGTCTT      |
| MMP-9       | F: GCTGACTACGATAAGGACGGCA  | R: CGGCCCTCAAAGATGAACGG    |
| CTSK        | F: GAAGAAGACTCACCAGAACGAG  | R: TCCAGGTTATGGGCAGAGATT   |
| Nrf2        | F: TCTTGGAGTAAGTCGAGAACGTG | R: GTTGAAGACTGAGCGAAAAAGGC |
| HO-1        | F: GAGATAGAGCGCAACAAGCAG   | R: CTTGACCTCAGGTGTCATCTC   |
| CAT         | F: CCCCTATTGCCGTTCGATTCT   | R: TTCAGGTGAGTCTGTGGTTT    |
| SOD         | F: CAGACCTGCCTTACGACTATGG  | R: CTCGGTGGCGTTGAGATTGTT   |
| GPX1        | F: AGTCCACCGTGTATGCCTTCT   | R: GAGACGCGACATTCTCAATGA   |



**Figure S1** TF3 enhanced the mRNA expression levels of *SOD* and *GPx1*. **(A)**The mRNA expression of *SOD*. **(B)**The mRNA expression of *GPx1*. n = 3, \*P < 0.05, \*\*P < 0.01 compared with C group. #P < 0.05, ##P < 0.01 compared with L group.



**Figure S2** TF3 did not lead to tissue damage in mice. Representative images of H&E staining of heart, liver, spleen, lung kidney of mice. Scale bar = 200  $\mu\text{m}$ .