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**Supplementary Data**

**Taurolidine improved protection against highly pathogenetic avian influenza H5N1 virus lethal-infection in mouse model by regulating the NF-κB signaling pathway**

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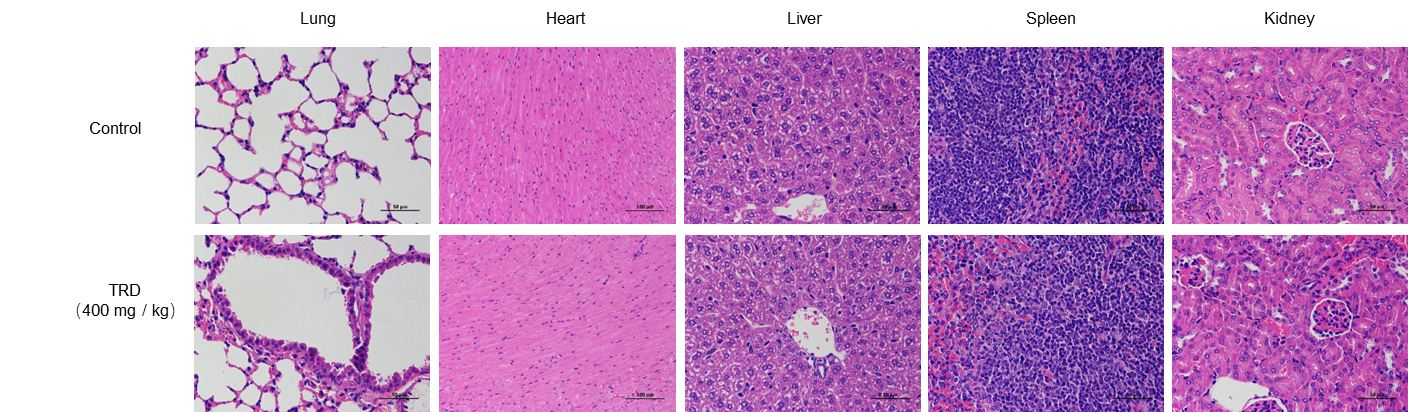
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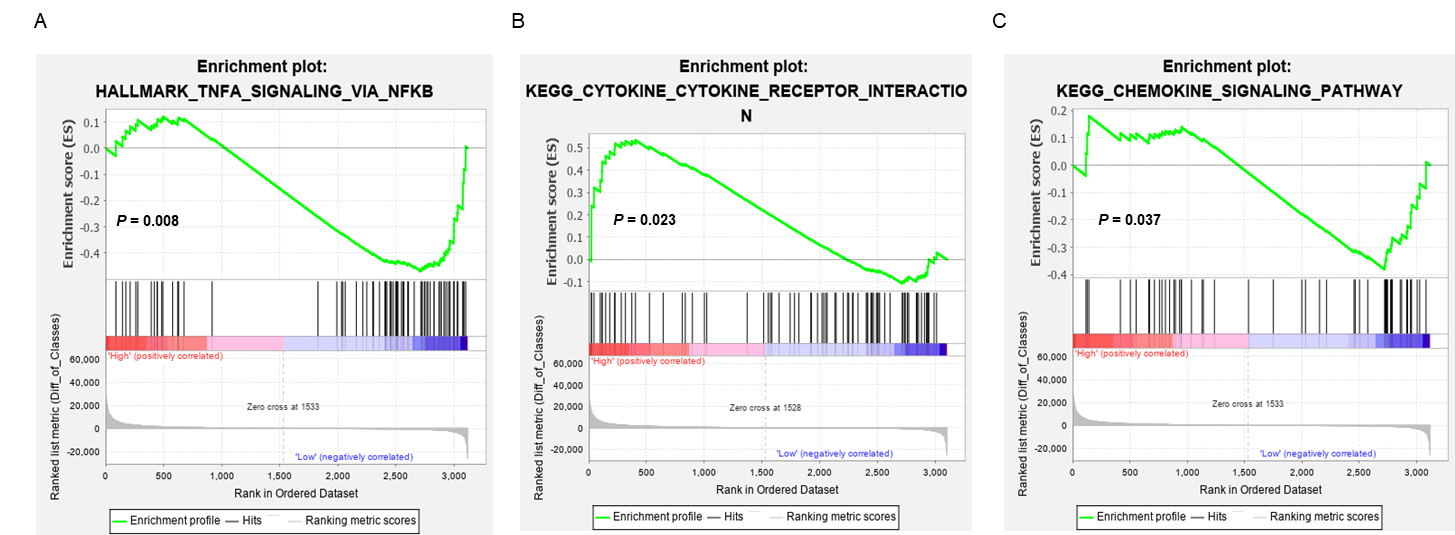
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**Figure S1.** Effect of TRD treatment on the tissues.The effect of TRD on the mouse tissues, including heart, liver, spleen, lung and kidney.



**Figure S2.** The effect of TRD treatment on cell signaling pathways. **A** GSEA analyzed global gene chip data from the lung tissues of different groups of mice after treatment TRD, and the TNF-α-NF-κB signaling pathway was significantly enriched. **B** The cytokine-cytokine receptor interaction signaling pathway was significantly enriched after treatment. **C** The chemokine signaling receptor interaction pathway was significantly enriched after treatment.

**Table S1 Primer sequences for PCR**

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| Gene Name | Primer Sequence (5′ to 3′) |
| *M* | F: 5′-CACACACGTCTCCGGGAGCAAAAGCAGGTAG-3′ |
| R: 5′-CACACACGTCTCCTATTAGTAGAAACAAGGTAGTTTTT-3′ |
| *β-actin* | F: 5′-TGGAATCCCTGTGGGACCATGAAAC-3′ |
|  | R: 5′-ATCATACTTGGCAGGTTTCTCCAGG-3′ |
| *IFN-α* | F: 5′-GCACCCTGCCTCAGACTCAC-3′  R: 5′-TGCCTGGTCATCTCATGGAAG-3′ |
| *IFN-γ* | F: 5′-AGCCAAATCGTCTCCTTCTACTTC-3′  R: 5′-TGCACCTTGTTGCTGCTGTT-3′ |
| *TNF-α* | F: 5′-AGCCCTGGTATGAACCCATC-3′  R: 5′-GGAATCGGCAAAGTCAAGGT-3′ |
| *IL-1β* | F:5′-TCATCGTGGCAGTGGAAAAG-3′  R: 5′-GGGAAGCAAGGGTCTCAGGT-3′ |
| *CCL2* | F: 5′-ACACAGAAGTGGGTGCAGGA-3′  R: 5′-GTTCTTGGGGTCTTGGGTTG-3′ |
| *CCL3* | F: 5′-GCTCAACATCATGAAGGTCTCC-3′  R: 5′-TGCCGGTTTCTCTTAGTCAGG-3′ |
| *CCL5* | F: 5′-CTCCTTGCTGCTTTGCCTAC-3′  R: 5′-ACACACCTGGCGGTTCTTTC-3′ |
| *CXCL-2* | F: 5′-CTCAAGAACATCCAAAGTGTG-3′  R: 5′-ATTCTTGAGTGTGGCTATGAC-3′ |
| *CXCL-3* | F: 5′-AACCGAAGTCATAGCCACAC-3′  R: 5′-TGCTCCCCTTGTTCAGTATC-3′ |
| *IRF3* | F: 5′-GAAAGCCAGGTTATCCCAGG-3′  R: 5′-AGATTGGCTT GGGTTCGATC-3′ |
| *IRF7* | F: 5′-GCTGGACGTGACCATCATGTA-3′  R: 5′-GGGCCGTATAGGAACGTGC-3′ |