## Thioredoxin1 Binding Metastasis-Associated Lung Adenocarcinoma Transcript 1 Attenuates Inflammation and Apoptosis after Intracerebral Hemorrhage

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## SUPPLEMENTARY DATA



**Supplementary Figure 1. Txn1 was the most differentially expressed RBP after ICH.** (A) PCA of the two groups of rats: 13 represents 13-month-old rats and 21 represents 21-month-old rats. (B) Volcano Plot of differentially expressed genes after ICH. (C) GO analysis of up-regulated differentially expressed genes. The x-axis indicated the enrichment P-value on a -log10 scale, and the y-axis indicated terms. (D) The heatmap of the top ten expressed RBPs between ICH and control. The x-axis indicated the enrichment P-value on a -log10 scale, and the y-axis indicated terms. (D) The heatmap of the top ten expressed RBPs between ICH and control. The x-axis indicated the enrichment P-value on a -log10 scale, and the y-axis indicated terms. 13 represents 13-month-old rats and 21 represents 21-month-old rats. (E) The Venn diagram of differentially expressed genes, RNA binding protein genes, and inflammation-related genes analyzed by RNA-seq. (F) The expression level of Trim25 and Txn1 in rats after ICH (n = 3), 13-month indicates 13-month-old rats and 21-month indicates 21-month-old rats.

## SUPPLEMENTARY DATA



**Supplementary Figure 2.** Expression of Txn1 and MALAT1. (A) The mRNA level of Txn1 confirmed by qRT-PCR. (B) The RNA level of MALAT1 in rats confirmed by qRT-PCR after ICH (n=5). (C) The Western blotting analysis of Txn1 in BV2 cells. (D) qRT-PCR showed Txn1 expression in BV2 cells (n=5). (E) qRT-PCR showed the RNA level of MALAT1 (n=5). (F) qRT-PCR showed the RNA level of MALAT1 in control group and MALAT1 siRNA transfected BV2 cells (n=5). Mann-Whitney U test was performed for comparisons between the two groups in (F) and Unpaired t-tests were performed for other comparisons between the two groups. Statistical significance was denoted by \*\*P < 0.01.

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Supplementary Figure 3. Expression of Txn1 in rats. (A) Immunostaining results showed co-localization of AAV-Txn1 with neurons (NeuN), astrocytes (GFAP) and microglia (Iba1) in AAV-Txn1 injected rats at 3 days after ICH. Scale bar =  $50 \mu m$ . (B) Immunostaining results showed co-localization of empty vector with neurons (NeuN), astrocytes (GFAP) and microglia (Iba1) in empty vector injected rats at 3 days after ICH. Scale bar =  $50 \mu m$ . (C) Immunostaining results showed Txn1 expression in the liver tissue. Scale bar =  $50 \mu m$ . (D) Immunostaining results showed Txn1 expression in the negative control. Scale bar =  $50 \mu m$ .