

Figure Legends

Figure 1. Nissl and TTC staining following H₂ inhalation in rats with HIBD.

a: Representative images of Nissl staining in the left frontal and parietal cortex and hippocampal CA1 region of the HIBD, 90-min H₂, and 90-min H₂ at 2 h after HI groups at 72 h after surgery. Scale bar = 100µm. n = 4 per group. **b:** Representative images of TTC staining on the first day after surgery from coronal brain sections of the HIBD, 90-min H₂, and 90-min H₂ at 2 h after HI groups at 24 h after surgery. **c:** The percentage of the cerebral infarct volume in the ipsilateral hemisphere of different groups. n = 4 per group. ** $P < 0.001$ vs. HIBD group, †† $P < 0.001$.

Figure 2. H₂ inhalation reduces neuronal apoptosis in the cortex and hippocampal CA1 of rats with HIBD. **a:** Representative TUNEL staining in the left frontal and parietal cortex and hippocampal CA1 region of rats from the HIBD, 90-min H₂ groups and 90-min H₂ at 2 h after HI groups at 72 h after surgery (green, TUNEL positive cells; blue, cell nuclei). Scale bar = 50µm. **b:** The percentage of TUNEL positive staining in each group. n = 4 per group. ** $P < 0.01$ vs. HIBD group, †† $P < 0.01$, † $P < 0.05$.