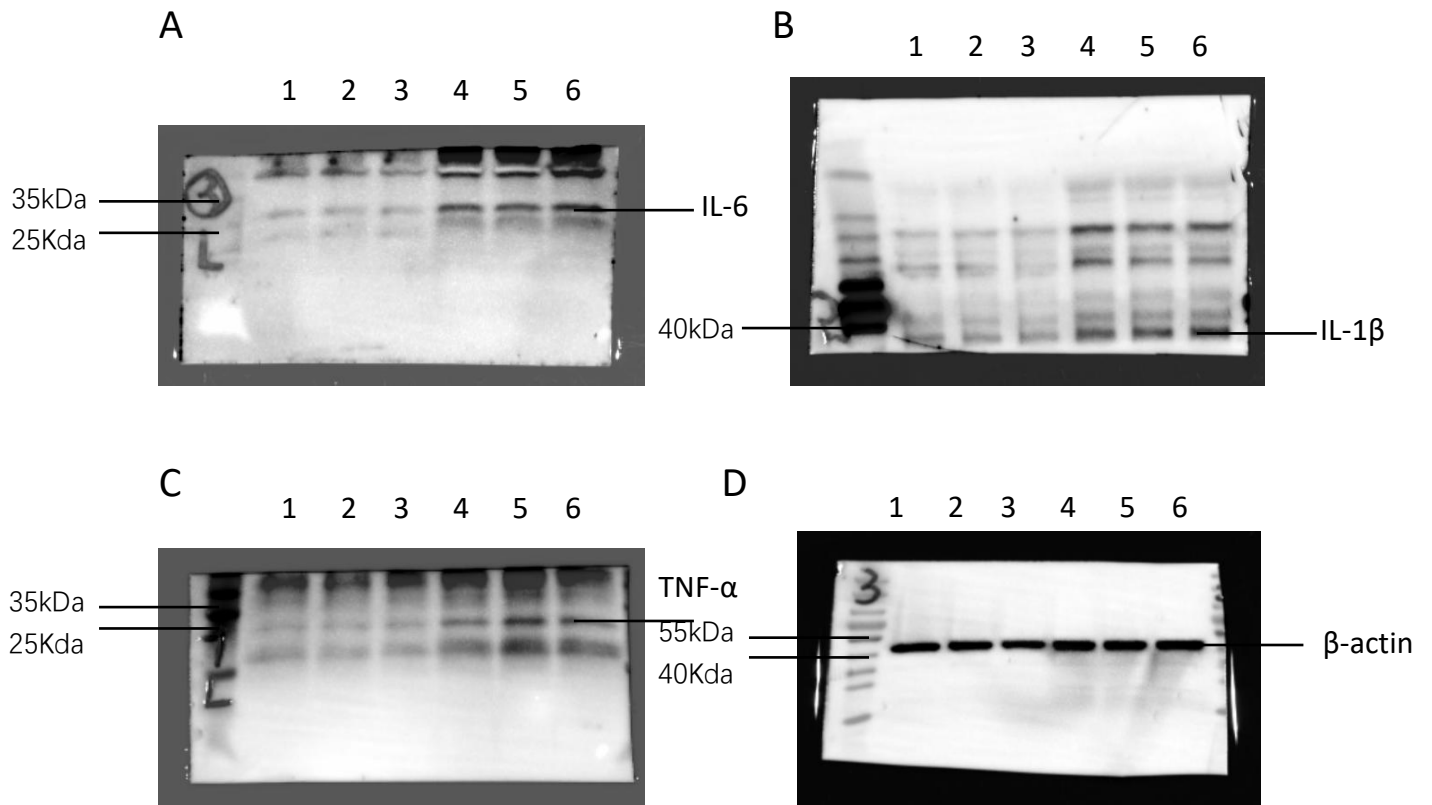
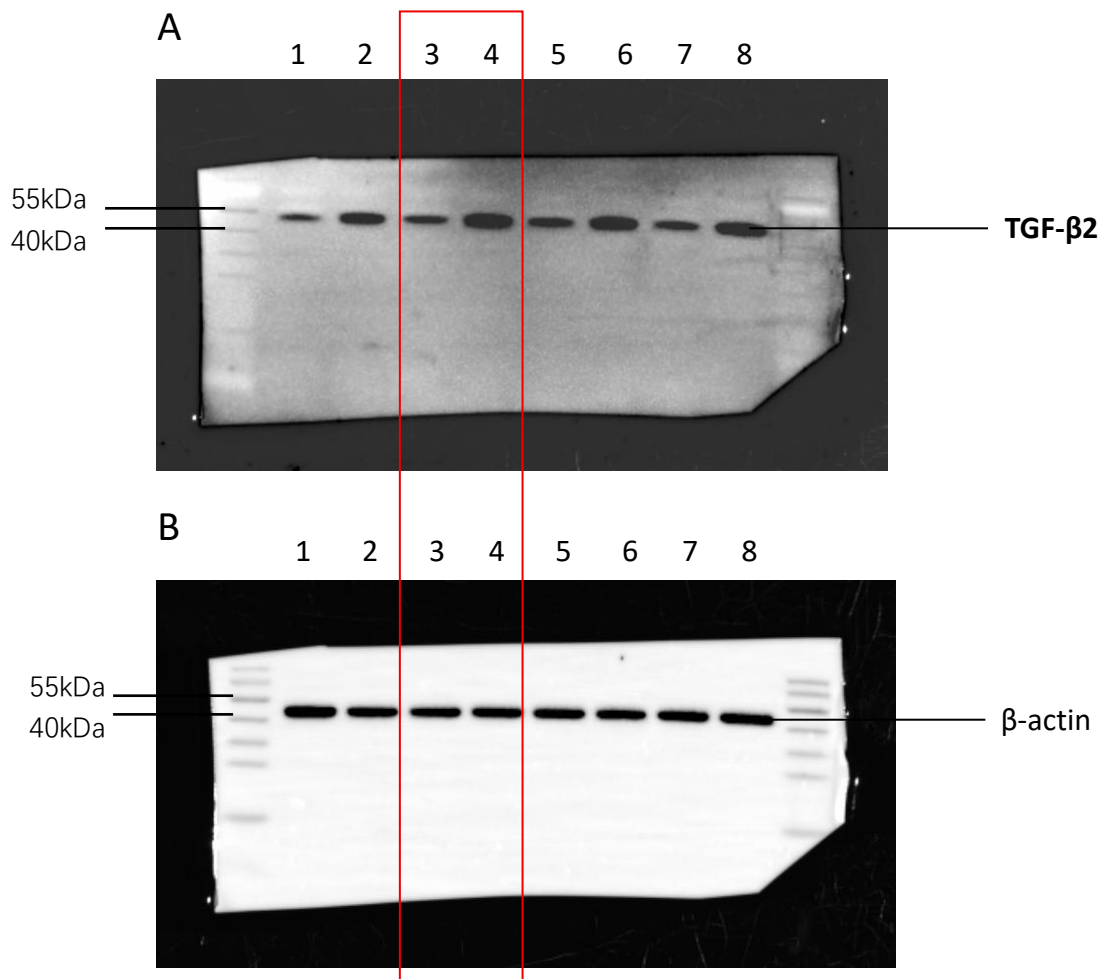


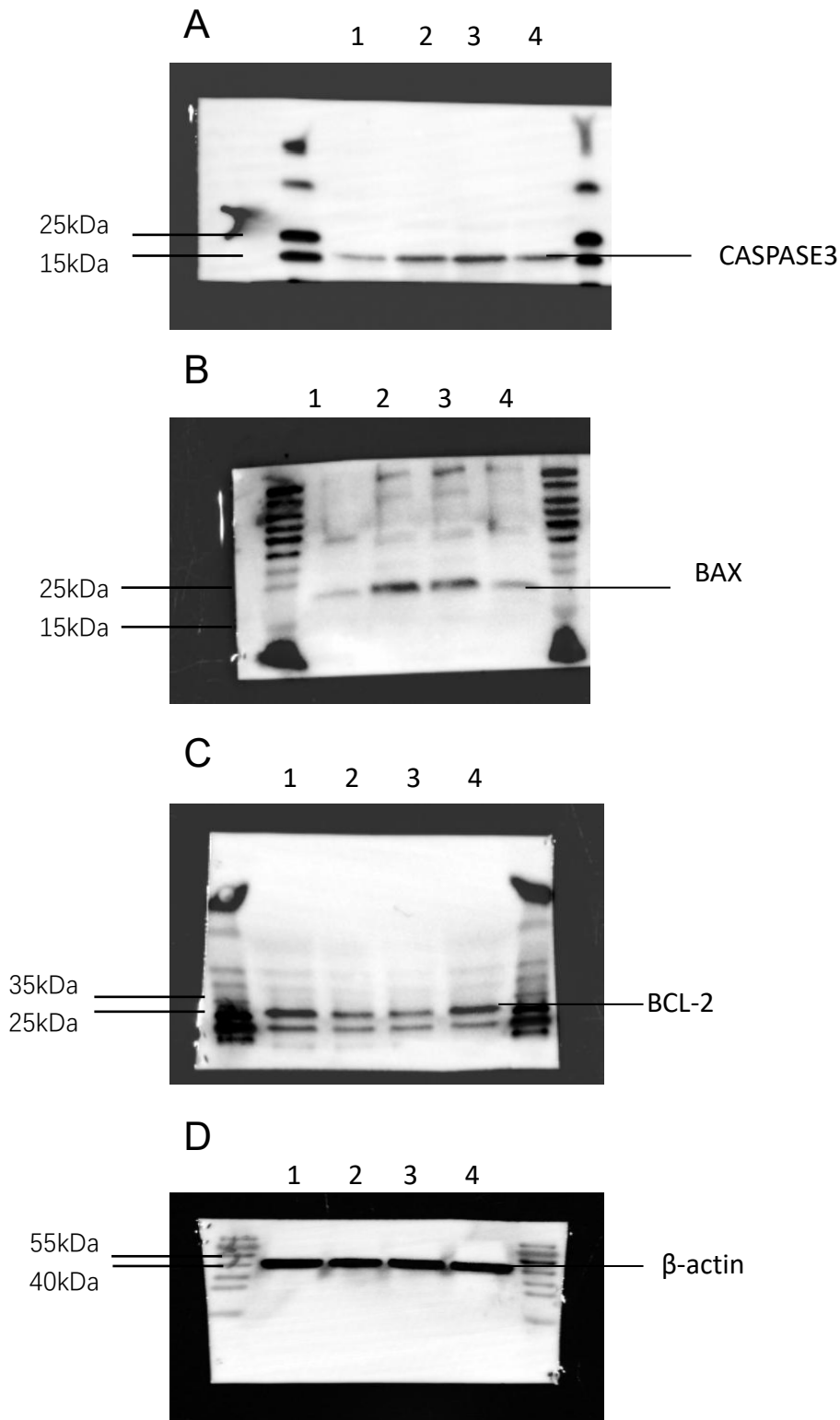
Supplementary Figure 1. As show in figure 1D, Western blot images for TGF- β 2 in peri-injury cortex of TBI mice. (A) TGF- β 2. (B) β -actin loading control.



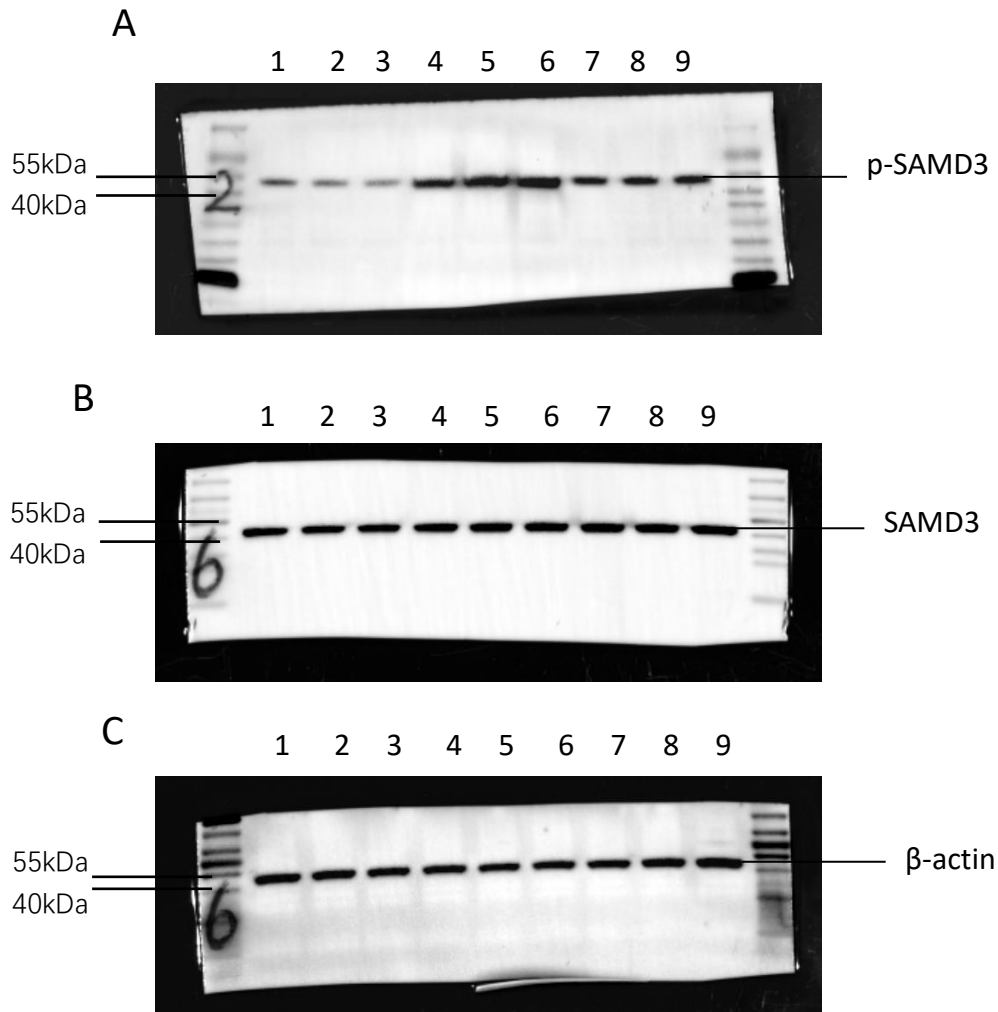
Supplementary Figure 2. As show in figure 2C, Western blot images for IL-6, IL-1 β , TNF- α after LPS stimulation. The following lane sequence applies to all images, 1: control replicate 1, 2: control replicate 2, 3: control replicate 3, 4: LPS replicate 1, 5: LPS replicate 2, 6: LPS replicate 3, (A) IL-6. (B) IL-1 β . (C) TNF- α . (D) β -actin loading control.



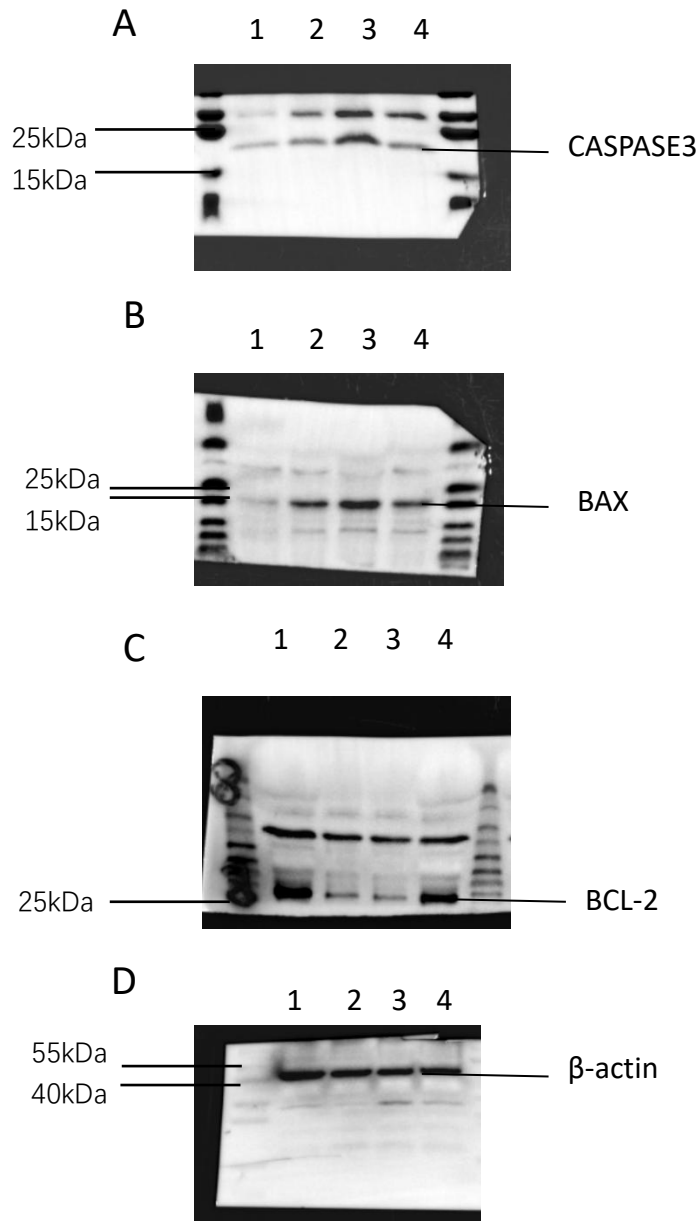
Supplementary Figure 3. As show in figure 2E(Lane 3, 4), Western blot images for TGF-β2 after TGF-β2 overexpression. The following lane sequence applies to all images, 1: control replicate 1, 2: TGF-β2 replicate 1, 3: control replicate 2, 4: TGF-β2 replicate 2, 5: control replicate 3, 6: TGF-β2 replicate 3, 7: control replicate 4, 8: TGF-β2 replicate 4. (A) TGF-β2. (B) β-actin loading control.



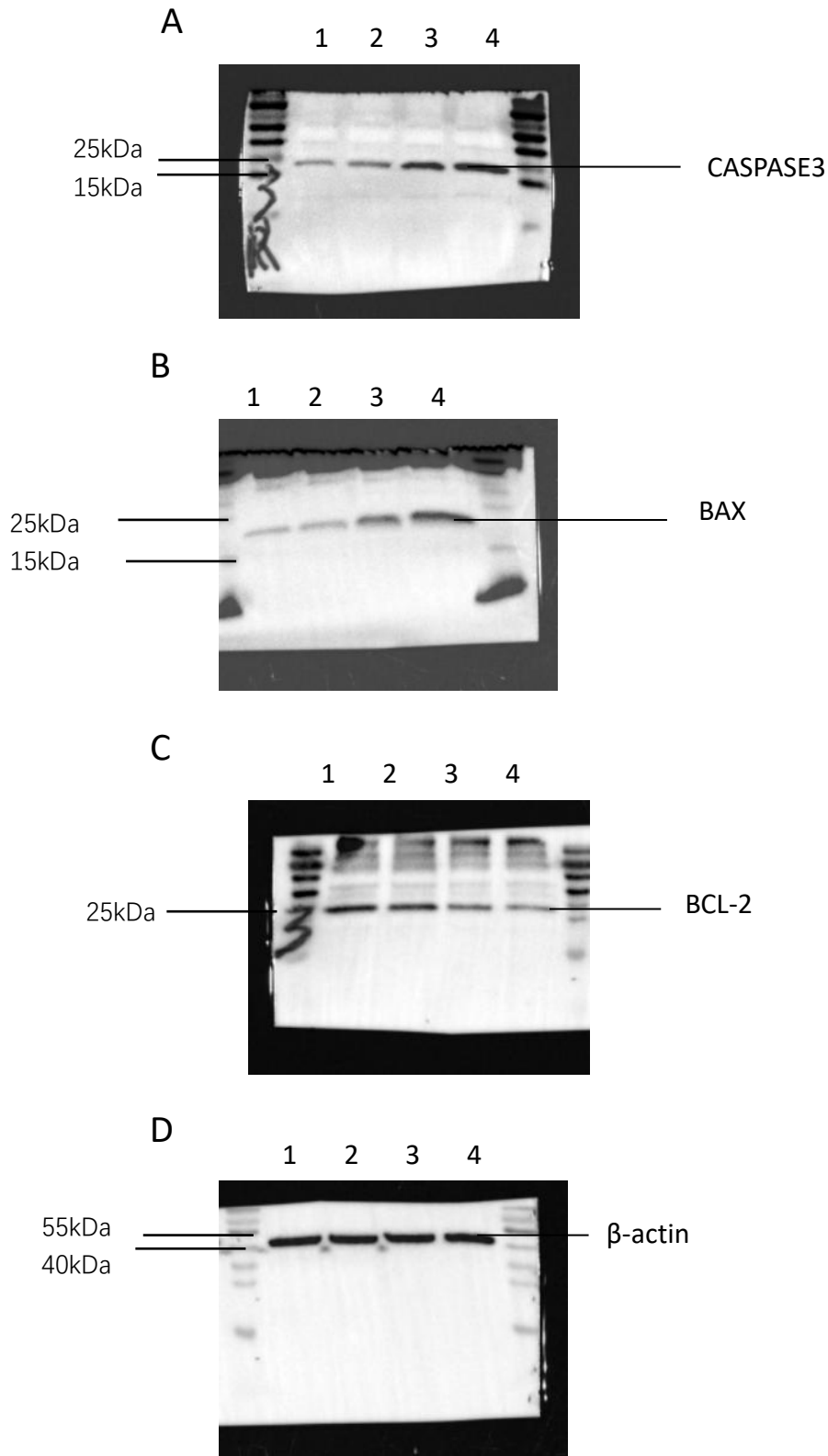
Supplementary Figure 4. As show in figure 3D, Western blot images for **CASPASE3**, **BAX**, **BCL-2** after co-cultured. The following lane sequence applies to all images, 1: CON-CM, 2: LPS-CM, 3: LPS+LV-NC-CM, 4: LPS+LV-TGF- β 2-CM. (A) CASPASE3. (B) . (C) BCL-2. (D) β -actin loading control.



Supplementary Figure 5. As show in figure 4A, Western blot images for p-SAMD3, SAMD3 under TGF- β 2 and ITD-1treatment. The following lane sequence applies to all images, 1: LV-NC replicate 1, 2: LV-NC replicate 2, 3: LV-NC replicate 3, 4: LV-TGF- β 2 replicate 1, 5: LV-TGF- β 2 replicate 2, 6: LV-TGF- β 2 3, 7: LV-TGF- β 2+ITD1 replicate 1, 8: LV-TGF- β 2+ITD1 replicate 2. 9: LV-TGF- β 2+ITD1 replicate 3. (A) p-SAMD3. (B) SAMD3. (C) β -actin loading control.



Supplementary Figure 6. As show in figure 4D, Western blot images for CASPASE3, BAX, BCL-2 after co-cultured. The following lane sequence applies to all images, 1: CON-CM, 2: LPS+LV-TGF- β 2-CM, 3: LPS+SIS3-CM, 4: LPS+LV-TGF- β 2+SIS3-CM. (A) CASPASE3. (B) BAX. (C) BCL-2. (D) β -actin loading control.



Supplementary Figure 6. As show in figure 5E, Western blot images for **CASPASE3**, **BAX**, **BCL-2** after co-cultured. The following lane sequence applies to all images, 1: sham, 2: TBI+TGF- β 2, 3: TBI+TGF- β 2+SIS3, 4: TBI+SIS3. (A) CASPASE3. (B) BAX. (C) BCL-2. (D) β -actin loading control.