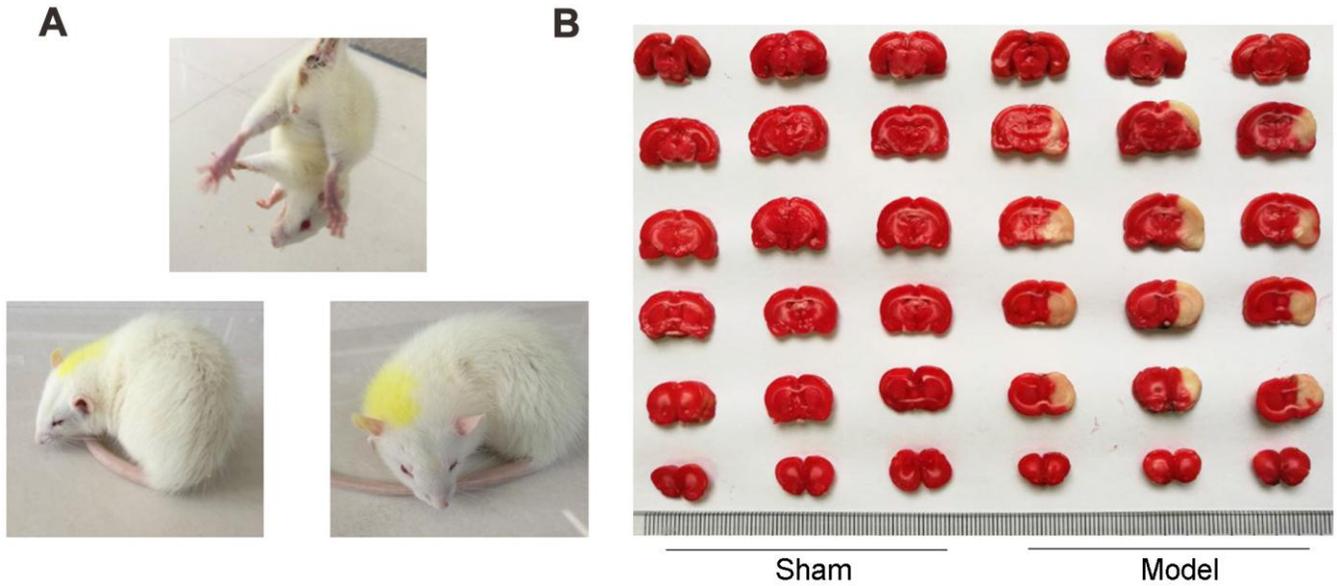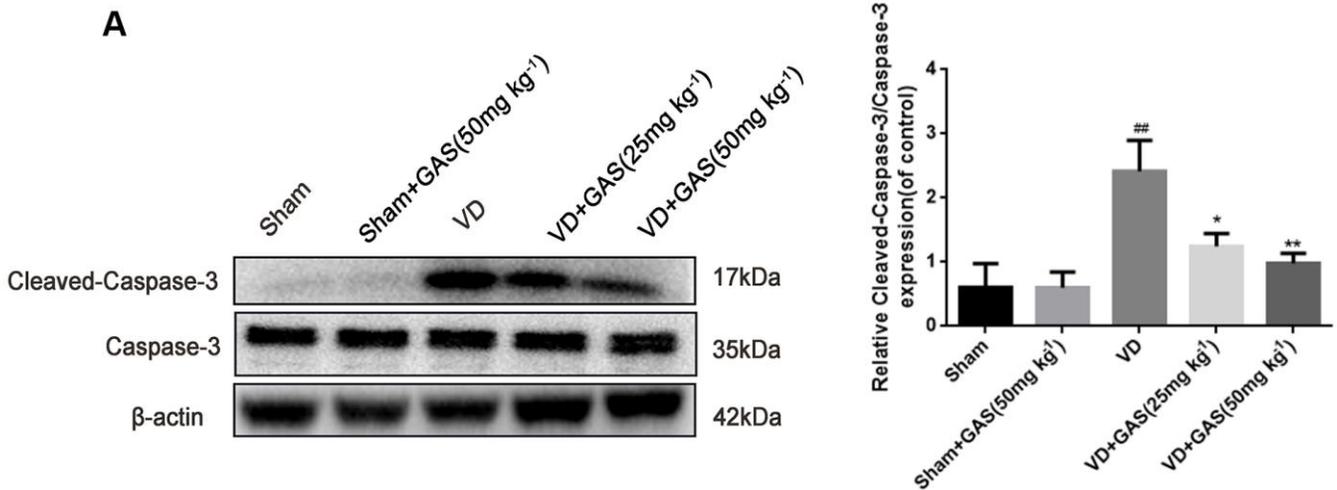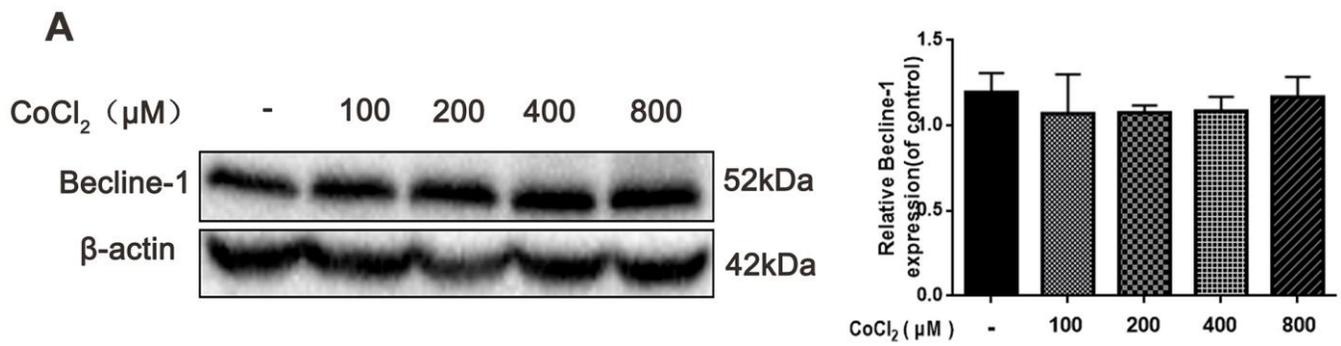**Supplementary Figure 1. Establishment of a rat model of vascular dementia.** (**A**) Representative images of "Longa scoring". (**B**) Tetrazolium Chloride (TTC) staining in rat brain tissue.

Supplementary Figure 2. Effects of GAS on the protein expression of Caspase-3 in the hippocampus tissues of rats. (**A**) The protein extract of hippocampal tissue was analyzed by Western blotting with Cleaved-Caspase-3 and Caspase-3 (left). Protein levels were quantified and normalized to β-actin (right). Data represent the mean ± SEM. ##$P < 0.01$ versus sham, *$P < 0.05$, **$P < 0.01$ versus model.

Supplementary Figure 3. Effects of CoCl₂ on the expression of autophagy-related proteins in HT22 cells. (**A**) Immunoblots showed levels of Becline-1 in HT22 cells treated with various concentrations of CoCl$_2$ (0, 100, 200, 400 and 800 µM) for 24 h. β-actin was used as loading control. Data represent the mean ± SEM. $^{##}P< 0.01$ versus control.