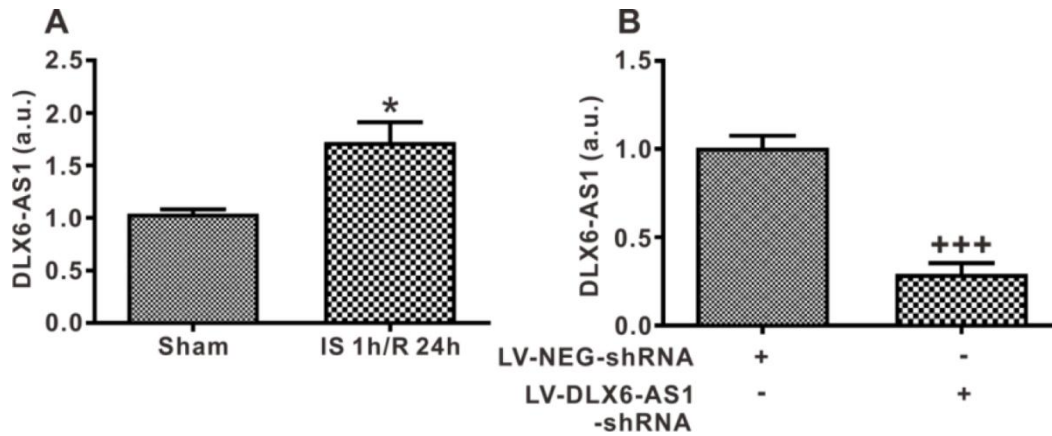
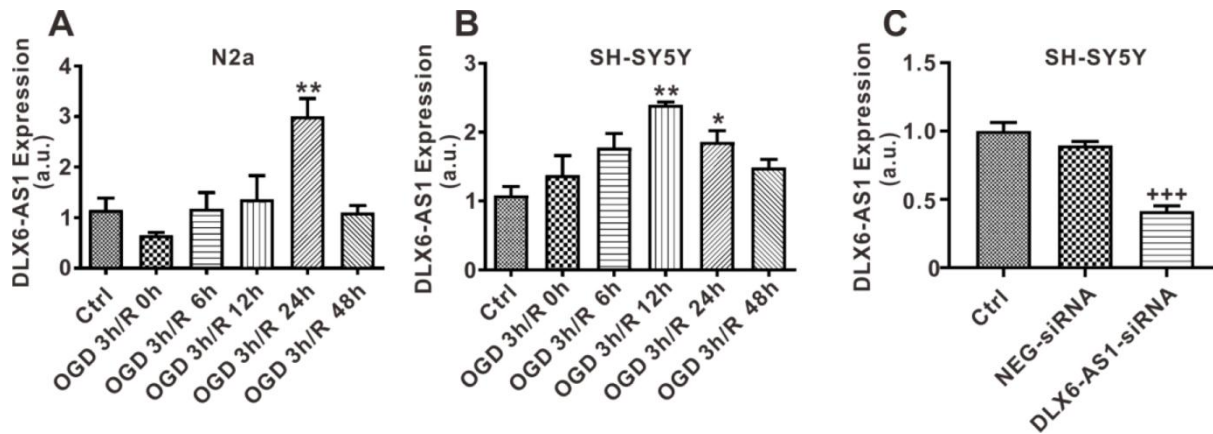


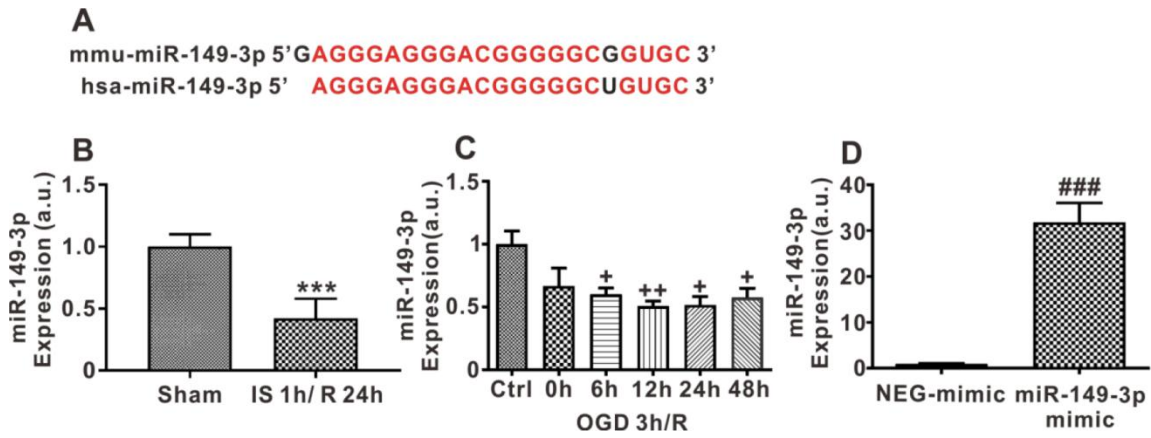
**SUPPLEMENTARY FIGURES**



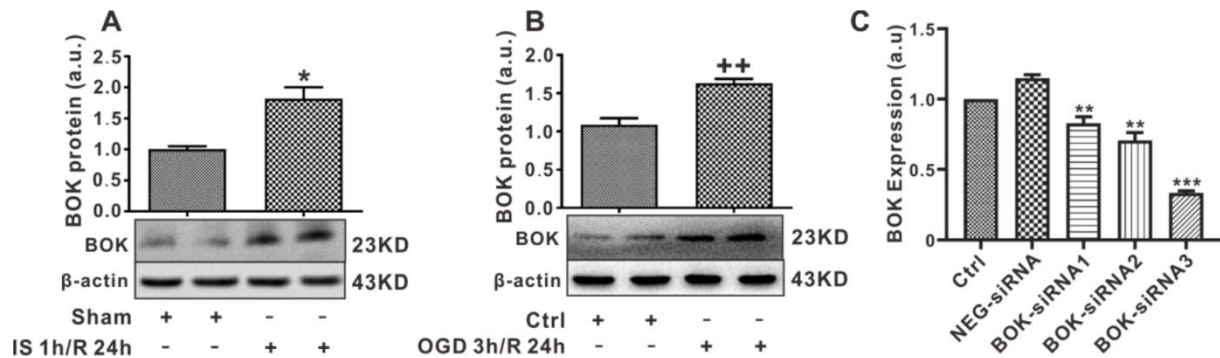
**Supplementary Figure 1. DLX6-AS1 expression in stroke.** (A) Normalized DLX6-AS1 *in vivo* expression levels upon I/R at reperfusion for 24 h. (B) DLX6-AS1 expression of mice icv injected with LV-DLX6-AS1-siRNA or LV-NEG seven days before MCAO. Values represent the mean ± SEM (n = 6 mice in each group). \*P < 0.05 vs sham, \*\*\*P < 0.001 vs LV-NEG-shRNA.



**Supplementary Figure 2. DLX6-AS1 expression in vivo OGD/R.** (A) Expression of DLX6-AS1 in N2a cells at different reperfusion times. (B) Expression of DLX6-AS1 in SH-SY5Y cells at different reperfusion times. (C) Expression of human DLX6-AS1 transfected by human DLX6-AS1-siRNA in SH-SY5Y. Values represent the mean ± SEM (n = 3 in each group). \*P < 0.05, \*\*P < 0.01 vs Ctrl; \*\*\*P < 0.001 vs NEG-siRNA.



**Supplementary Figure 3. miR-149-3p expression in stroke.** (A) The sequences of mmu-miR-149-3p and hsa-miR-149-3p. (B) miR-149-3p expression of in the brains of mice treated by IS/R; (C) miR-149-3p expression in N2a cells treated by OGD/R; (D) A miR-149-3p mimic upregulates miR-149-3p expression. Values represent the mean  $\pm$  SEM ( $n = 3-6$  in each group). \*\*\* $P < 0.001$  vs Sham; \* $P < 0.05$ , \*\* $P < 0.01$  vs Ctrl; ### $P < 0.001$  vs NEG-mimic.



**Supplementary Figure 4. BOK expression in stroke.** (A) BOK expression in the brain I/R model. (B) BOK expression in N2a cells treated by OGD/R. (C) BOK mRNA expression of N2a cell treated by transfected with different BOK siRNA. Values represent the mean  $\pm$  SEM ( $n = 3$  in each group). \* $P < 0.05$  vs Sham; \*\* $P < 0.01$  vs Ctrl; ### $P < 0.01$ , #### $P < 0.001$  vs NEG-siRNA.