## SUPPLEMENTARY FIGURES



Supplementary Figure 1. Immunofluorescence detection of NLRP3 expression in mice hippocampus CA1 section treated with NLRP3 inhibitor and Golph3 inhibitor. (A, B) Immunohistochemistry detection of NLRP3 in hippocampus CA1 section of mice in DMSO, STZ + DMSO, STZ + ZAF, STZ + BRO, STZ + ZAF + BRO groups. All data are presented as means  $\pm$  SEM (n = 8/group). Bar=100  $\mu$ m. \* p < 0.05 and \*\* p < 0.01 compared with control group.



Supplementary Figure 2. Immunofluorescence detection of NLRP3 expression in mice cortex treated with NLRP3 inhibitor and Golph3 inhibitor. (A, B) Immunohistochemistry detection of NLRP3 in cortex of mice in DMSO, STZ + DMSO, STZ + ZAF, STZ + BRO, STZ + ZAF + BRO groups. All data are presented as means  $\pm$  SEM (n = 8/group). Bar=100 µm. \* p < 0.05 and \*\* p < 0.01 compared with control group.



Supplementary Figure 3. Immunofluorescence detection of Golph3 expression in mice hippocampus CA1 section treated with NLRP3 inhibitor and Golph3 inhibitor. (A, B) Immunohistochemistry detection of NLRP3 in hippocampus CA1 section of mice in DMSO, STZ + DMSO, STZ + ZAF, STZ + BRO, STZ + ZAF + BRO groups. All data are presented as means  $\pm$  SEM (n = 8/group). Bar=100  $\mu$ m. \* p < 0.05 and \*\* p < 0.01 compared with control group.



Supplementary Figure 4. Immunofluorescence detection of Golph3 expression in mice cortex treated with NLRP3 inhibitor and Golph3 inhibitor. (A, B) Immunohistochemistry detection of NLRP3 in cortex of mice in DMSO, STZ + DMSO, STZ + ZAF, STZ + BRO, STZ + ZAF + BRO groups. All data are presented as means  $\pm$  SEM (n = 8/group). Bar=100 µm. \* p < 0.05 and \*\* p < 0.01 compared with control group.