## SUPPLEMENTAL MATERIAL



**Supplemental Figure I.** SAH grades after SAH surgery. There were significant differences of SAH grades between sham and SAH animals up to 72 hours, but no significantly difference between SAH groups. n=6 for each group, \*p<0.05 vs. Sham.



**Supplemental Figure II.** Administration of LXA4 significantly increased brain LXA4 in sham and SAH animals at 24 hours after LXA4 injection. n=6 for each group, \*p<0.05 vs. Sham+vehicle, #p<0.05 vs. SAH+vehicle.



Supplemental Figure III. Results of siRNA transfection. In vivo transfected cells 24 h after intracerebroventricular injection of fluorescence conjugated Control siRNA-A in rats. Images were obtained from 20  $\mu$ m cryosections of rat brain using an OLYMPUS BX51 microscope with fluorescence light. Scale bar=30 $\mu$ m.



**Supplemental Figure IV**. Administration of LXA4 reduced expression of IL-1 $\beta$  and IL-6 dependent on FPR2/p38 pathway in hippocampus. Administration of LXA4 had no effects on the expression of FPR2 after SAH (A), but increased the phosphorylation of p38 (B), and expression of IL-1 $\beta$  (C) and IL-6 (D). Silencing FPR2 by siRNA significantly decrease the level of FPR2 and removed the effects of LXA4. n=6 for each group. #p<0.05 vs. SAH+vehicle, &p<0.05 vs. SAH+LXA4, %p<0.05 vs. SAH+LXA4+ sramble siRNA.