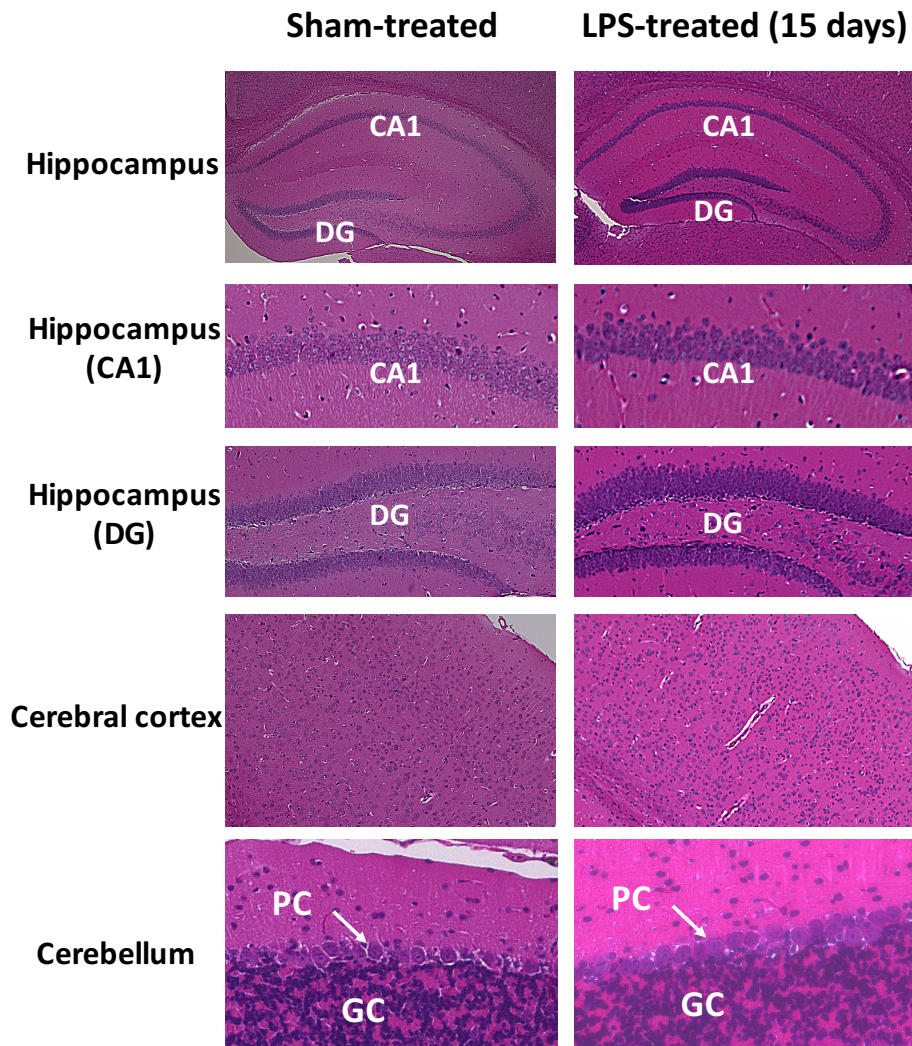


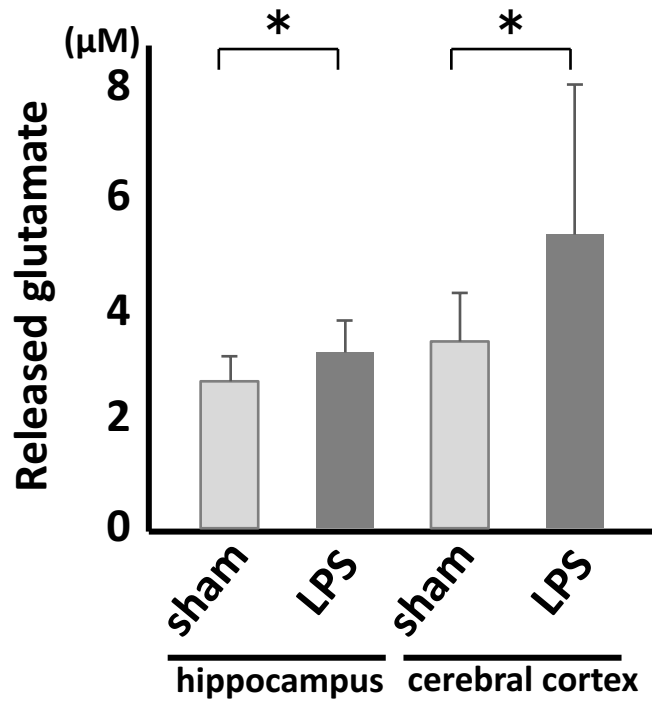
**System  $\alpha_c$  in microglia is a novel therapeutic target for post-septic neurological and psychiatric illness**

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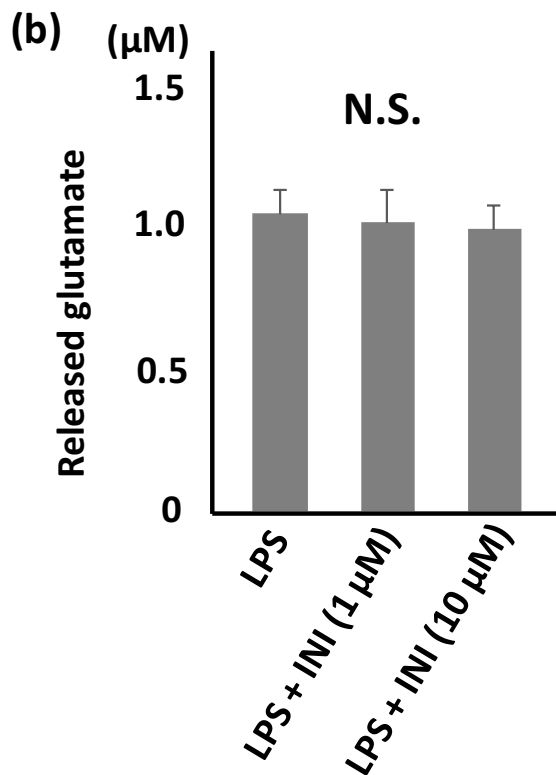
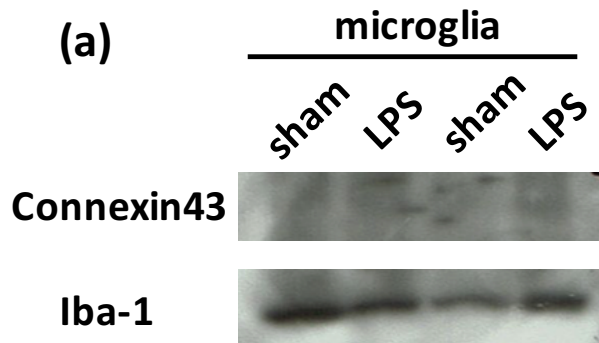
Supplementary Figure S1.

HE staining of the hippocampus, cerebral cortex, and cerebellum. Left panels show the brain section from control mice. Right panels show the section from mice treated with LPS (15 days). Obvious neuronal death is not observed. CA1: CA1 area of the hippocampus. DG: Dentate Gyrus. PC: Purkinje cell. GC: granule cells.



Supplementary Figure S2.

The level of glutamate released by microglia isolated from the hippocampus and cerebral cortex. Released glutamate from microglia was significantly higher than that released by microglia isolated from sham-treated. \*:  $p < 0.05$ , ANOVA.



Supplementary Figure S3.

(a) Western blot analysis using connexin 43 antibody. Induction of connexin 43 in microglia derived from the brain treated with LPS is slight. (b) Comparison of microglial glutamate release among 3 groups: LPS only; LPS + INI0602 (1 µM); LPS + INI0602 (10 µM).

INI0602 slightly inhibit glutamate release, but the change is not statistically significant.  $n = 3$ .  $4 \times 10^5$  cells are used in each group.