Supplementary Information

Manuscript title: Zika virus exposure affects neuron-glia communication in the hippocampus of adult rats

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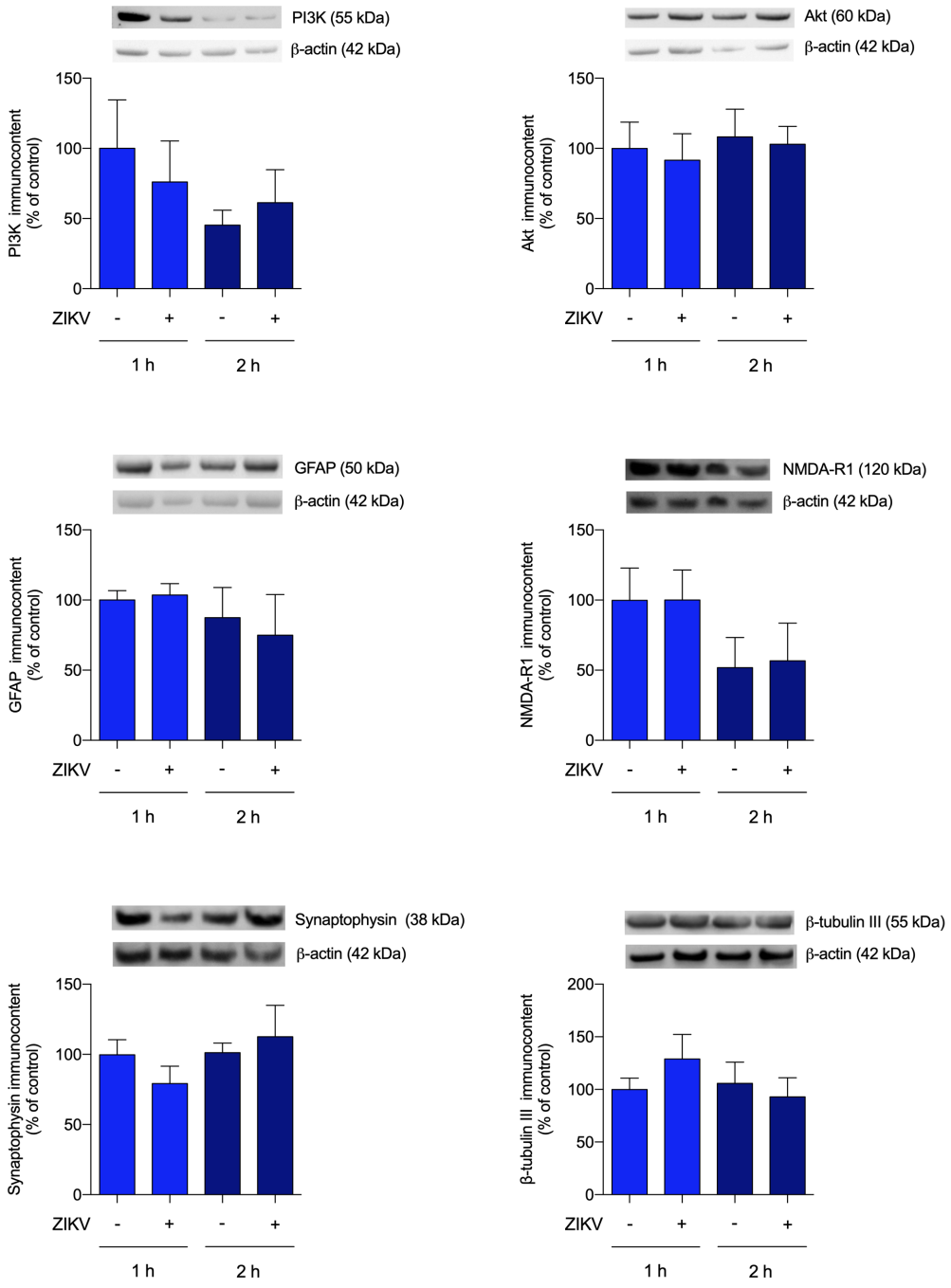
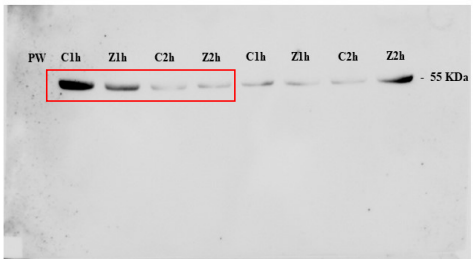
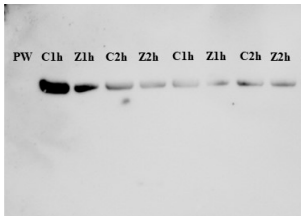


Figure S1. Effects of ZIKV on immunocontent of proteins related to neuronal and glial functions. Hippocampal slices were infected with 10^5 PFU of ZIKV (non-infection controls were simultaneously carried out). Western blotting analysis for (a) PI3K; (b) Akt; (c) GFAP; (d) NMDA-R1; (e) synaptophysin; (f) β-tubulin III were performed in the hippocampal slices after 1 h or 2 h incubation. Bars represent means ± SEM of at least three experimental determinations, analyzed by one-way ANOVA followed by Tukey's test. Representative western blotting images are shown in the graphs.

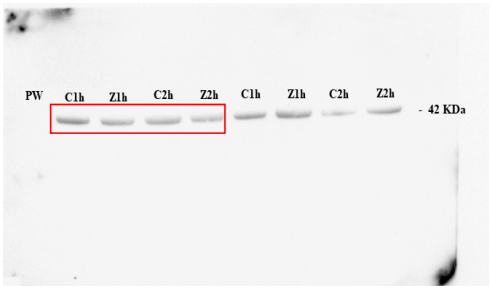
PI3K (55 kDa)





PW, Protein weight
C1h, Control 1 h
Z1h, ZIKV 1 h
C2h, Control 2 h
Z2h, ZIKV 2 h

β-actin (42 kDa) for PI3K analysis



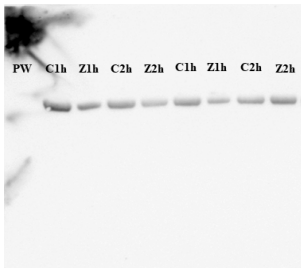
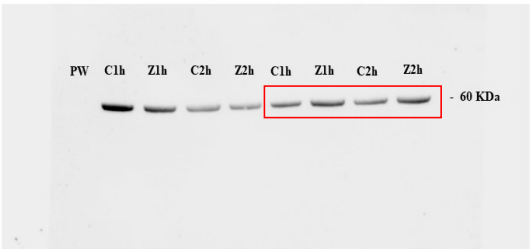
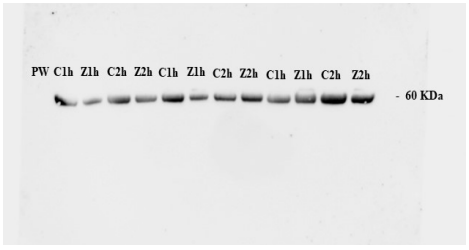


Figure S2. Full-length western blot membranes for PI3K detection and the respective β-actin controls. Red boxes highlight the bands used as representative images in the Figure S1.

Akt (60 kDa)





PW, Protein weight
C1h, Control 1 h
Z1h, ZIKV 1 h
C2h, Control 2 h
Z2h, ZIKV 2 h

β-actin (42 kDa) for Akt analysis

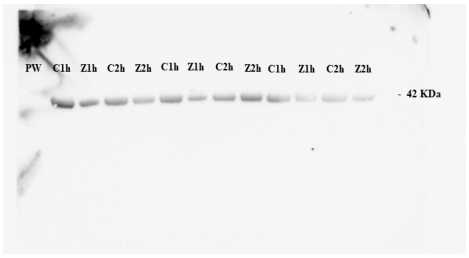
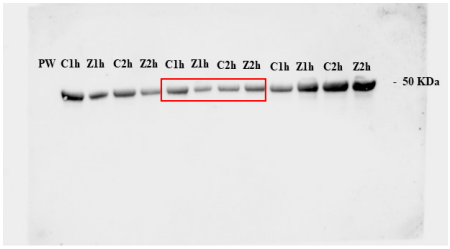


Figure S3. Full-length western blot membranes for Akt detection and the respective β-actin controls. Red boxes highlight the bands used as representative images in the Figure S1.

GFAP (50 kDa)



PW, Protein weight

C1h, Control 1 h

Z1h, ZIKV 1 h

C2h, Control 2 h

Z2h, ZIKV 2 h

β-actin (42 kDa) for GFAP analysis

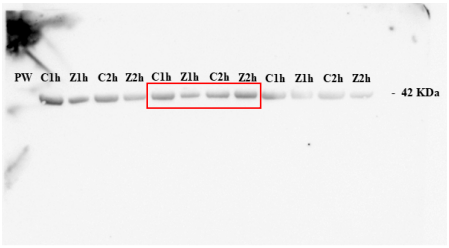
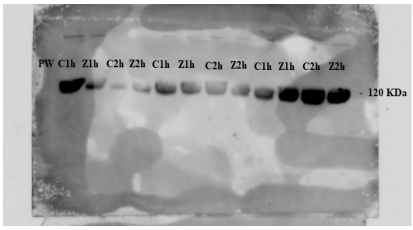
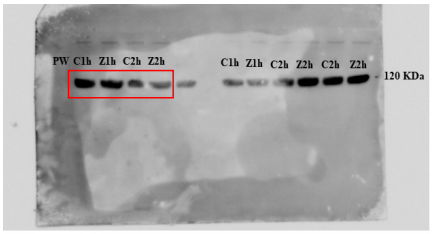


Figure S4. Full-length western blot membranes for GFAP detection and the respective β-actin controls. Red boxes highlight the bands used as representative images in the Figure S1.

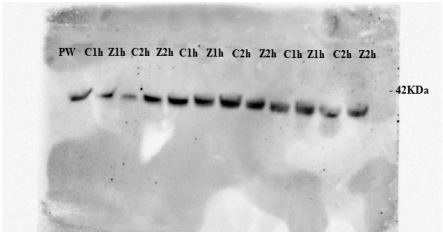
NMDA-R1 (60 kDa)





PW, Protein weight
C1h, Control 1 h
Z1h, ZIKV 1 h
C2h, Control 2 h
Z2h, ZIKV 2 h

β-actin (42 kDa) for NMDA-R1 analysis



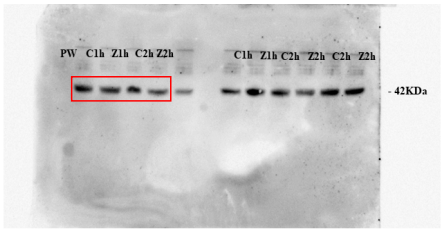
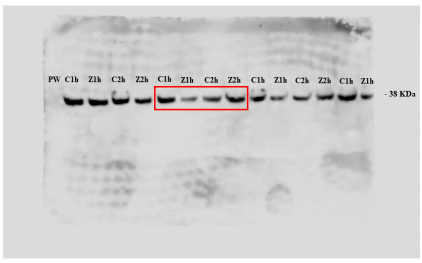
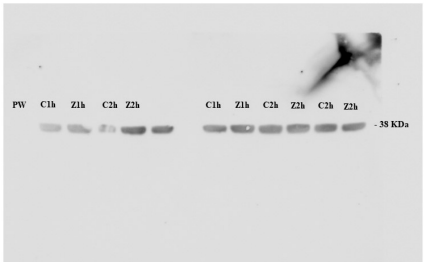


Figure S5. Full-length western blot membranes for NMDA-R1 detection and the respective β-actin controls. Red boxes highlight the bands used as representative images in the Figure S1.

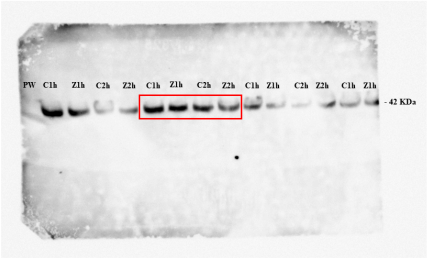
Synaptophysin (38 kDa)





PW, Protein weight
C1h, Control 1 h
Z1h, ZIKV 1 h
C2h, Control 2 h
Z2h, ZIKV 2 h

β-actin (42 kDa) for synaptophysin analysis



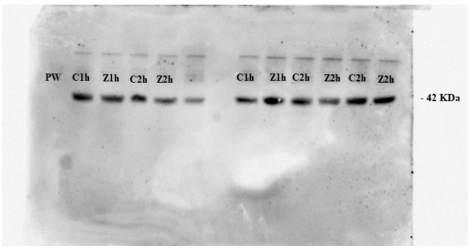
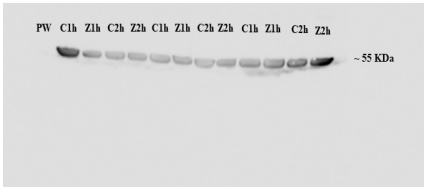
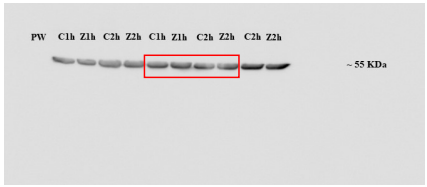


Figure S6. Full-length western blot membranes for synaptophysin detection and the respective β-actin controls. Red boxes highlight the bands used as representative images in the Figure S1.

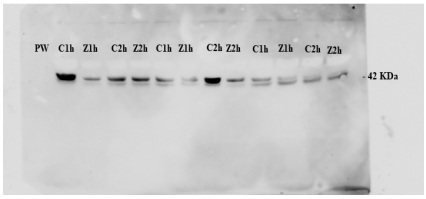
β-tubulin III (55 kDa)





PW, Protein weight
C1h, Control 1 h
Z1h, ZIKV 1 h
C2h, Control 2 h
Z2h, ZIKV 2 h

β-actin (42 kDa) for β-tubulin III analysis



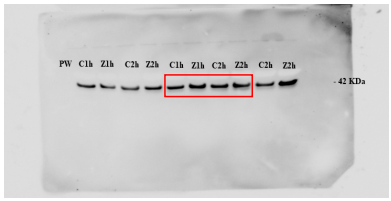


Figure S7. Full-length western blot membranes for β-tubulin III detection and the respective β-actin controls. Red boxes highlight the bands used as representative images in the Figure S1.