

Supplementary Figure S2

ifi27 gene expression in mouse influenza infection model. Eight to twelve weeks old female mice from four Collaborative Cross founder strains were infected intranasally with 10 FFU of the mouse-adapted influenza H3N2 virus (A/HK/01/68). Whole blood samples were analyzed for gene expression changes from mock-treated mice and at days 3 and 5 post infection (GSE74077). On the y-axis, Ifi27 gene-expression levels are presented as normalized Log2-signal intensities. On the x-axis, mouse strains are presented as follows - B6: C57BL/6J, 129: 129S1/SvImJ, CAST: CAST/EiJ, PWK: PWK/PhJ mouse strains; md3: mock-infected mice at day 3 post treatment; d3, d5: infected mice at day 3 and 5 post infection, respectively. These findings show that Ifi27 was upregulated in all four strains of different severity: mild (PWK/PhJ, all infected mice survived), intermediate (C57BL/6J, 129S1/SvImJ, 50% of infected mice survived) and severe (CAST/EiJ, all infected mice died). Therefore, these findings confirmed that Ifi27 was an influenza biomarker in mild, moderate and severe infection.