

Supplemental Figure

HIF1 α -dependent metabolic signals control the differentiation of follicular helper T cells

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Fig. S1

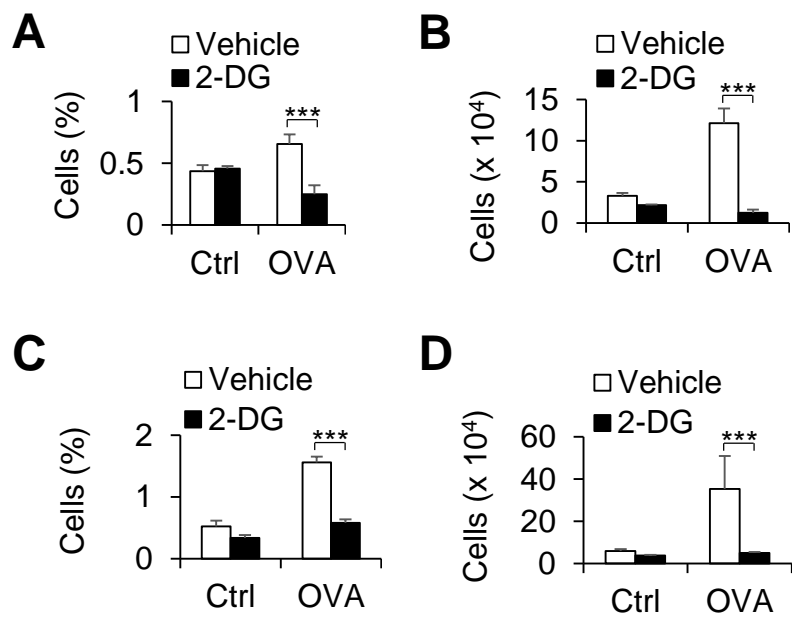


Figure S1. Blocking glycolysis inhibits T_{FH} cell differentiation upon foreign antigen stimuli. Flow cytometry analysis of plasma cells and IL-21⁺CXCR5⁺T_{FH} cells in spleen. The percent and absolute number of plasma cells (A and B) and IL-21⁺CXCR5⁺T_{FH} cells (C-D) are shown. ***P < 0.001, compared with the indicated groups.

Fig. S2

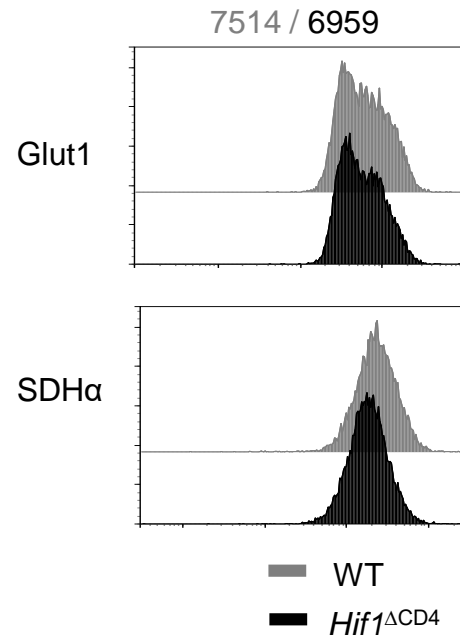


Figure S2. HIF1 α is responsible for glycolysis and OXPHOS in T_{FH} cell differentiation and GC responses.

Flow cytometry analysis of Glut1 and SDH α expression of T_{FH} cells in spleen from WT and HIF1 α -deficient mice at 8 days after OVA-immunization.

Fig. S3

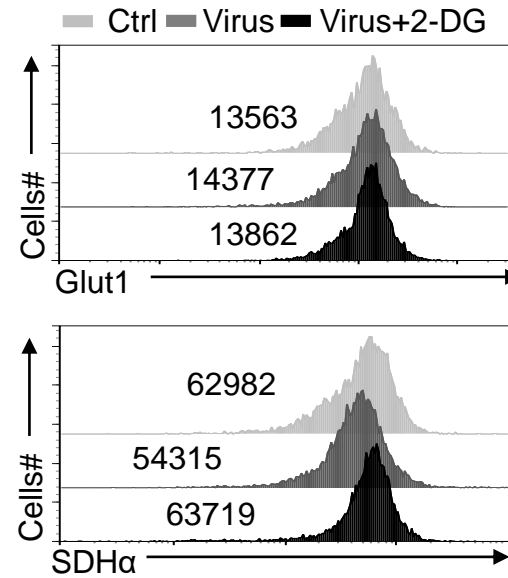


Figure S3. Alterations of glycolysis and OXPHOS signaling controls T_{FH} cell differentiation upon PR8 virus infection. Flow cytometry analysis of Glut1 and SDHα expression of T_{FH} cells in lung from PR8-infected mice at 8 days in the presence of 2-DG treatment. .

Fig. S4

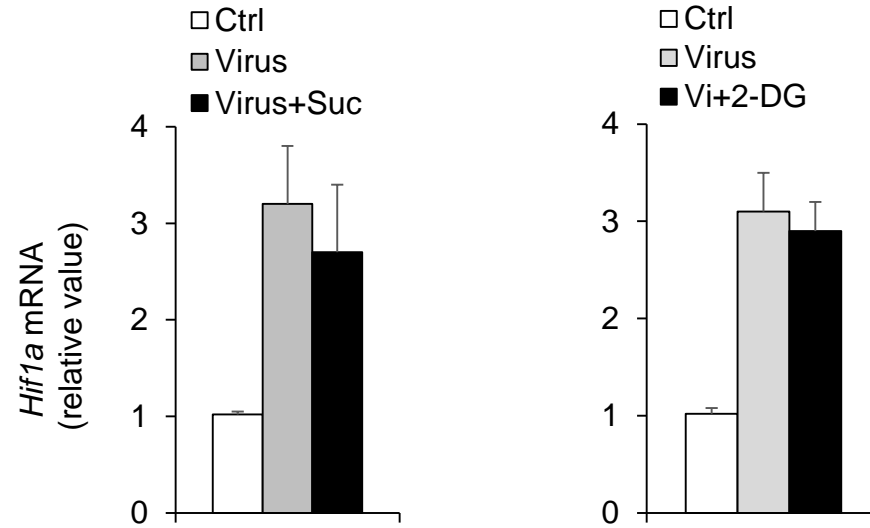


Fig. S4. Alterations of glycolysis and OXPHOS signaling controls T_{FH} cell differentiation upon PR8 virus infection. Real-time PCR of *Hif1a* mRNA in T_{FH} cells sorted from lung from PR8-infected mice at 8 days in the presence of 2-DG treatment.

Fig. S5

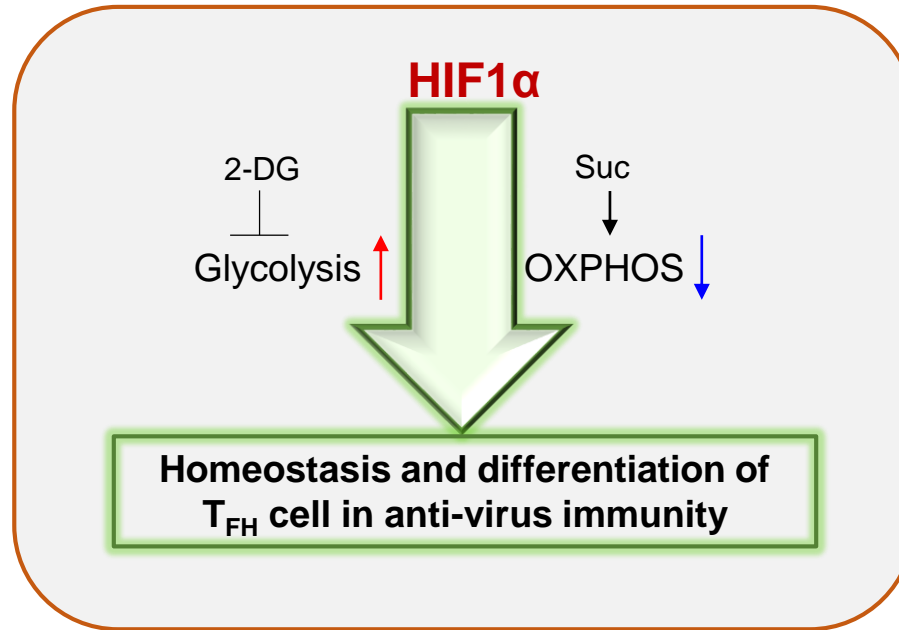


Fig. S5 Regulations of glycolytic activities on homeostasis and differentiation of T_{FH} cells in anti-virus immunity. Proposed model how glycolysis and OXPHOS in T_{FH} cells integrate the adaptive stimuli to regulate the GC responses and T_{FH} cell differentiation under steady state or antigen immunization even in anti-virus immunity through metabolic dependent mechanisms.