

Supplemental Figure 1

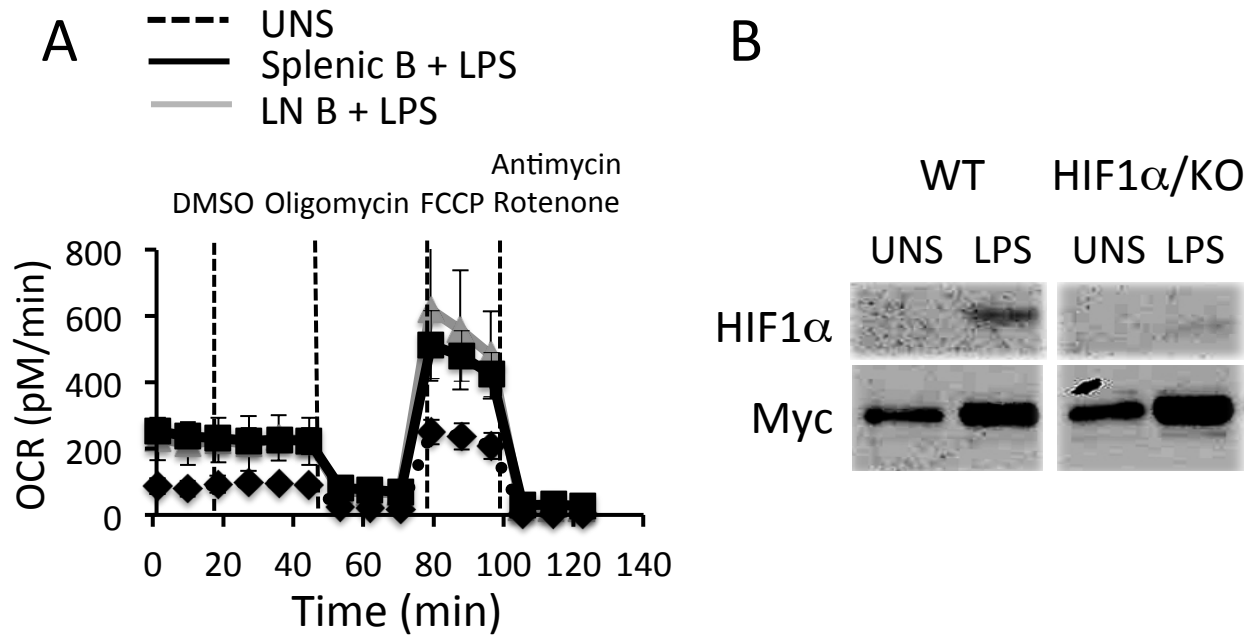


Figure S1. B cell tissue of origin and HIF1 α do not affect metabolism. **A.** B cells purified from spleen or lymph node were unstimulated (UNS) or treated with LPS for 6 hours prior to measurement of OCR. Cells were treated with vehicle (DMSO) and inhibitors as indicated. **B.** Control (WT; HIF1 $\alpha^{+/+}$) and HIF1 $\alpha^{fl/fl}$ ROSA26-CreER B cells from tamoxifen-treated mice were analyzed by immunoblot unstimulated (UNS) or after 1- day treatment with LPS.

Supplemental Figure 2

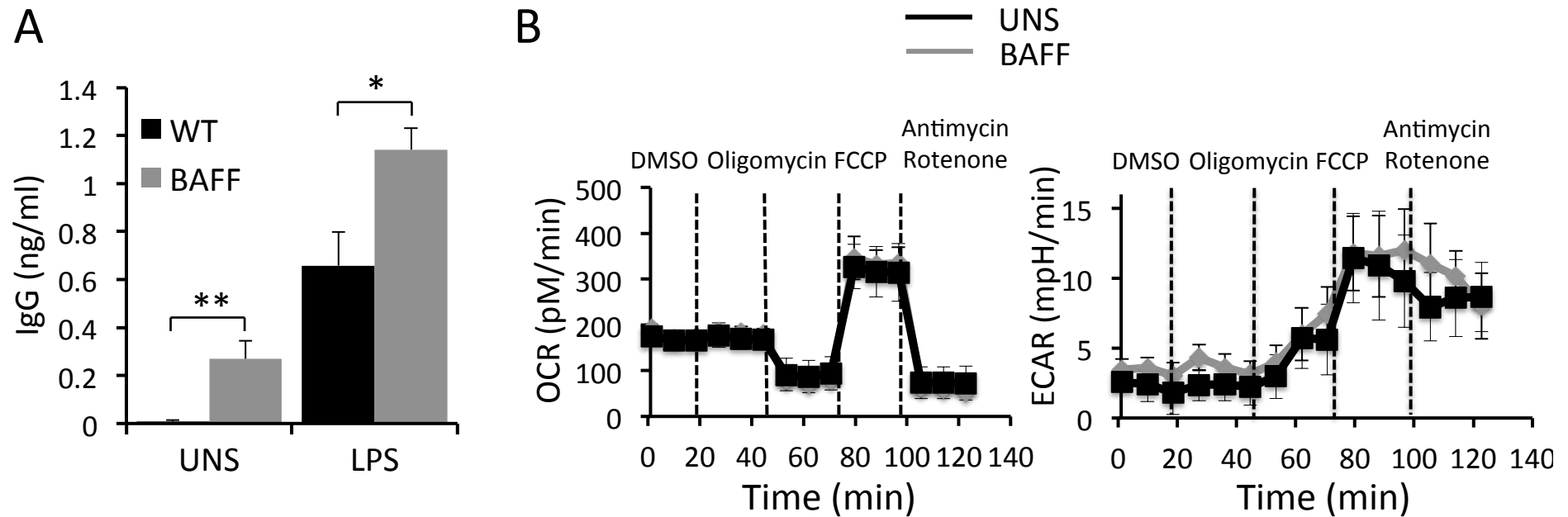


Figure S2. B cells from BAFF-transgenic mice have increased spontaneous and induced IgG secretion but acute BAFF treatment does not affect metabolism. **A.** Purified B cells from control (WT) or BAFF-transgenic mice were cultured in BAFF alone to maintain viability (UNS) or stimulated with LPS and secreted IgG was measured after 3 days. Representative data of 3 or more independent experiments and means and standard deviations are shown. Statistical significance was determined by Student's T test (* $p \leq 0.05$, ** $p \leq 0.005$). **B.** Purified wild type B cells were unstimulated (UNS) or cultured with 20ng/ml BAFF for 6 hours prior to measurement of OCR and ECAR. Cells were treated with vehicle (DMSO) and inhibitors as indicated.

Supplemental Figure 3

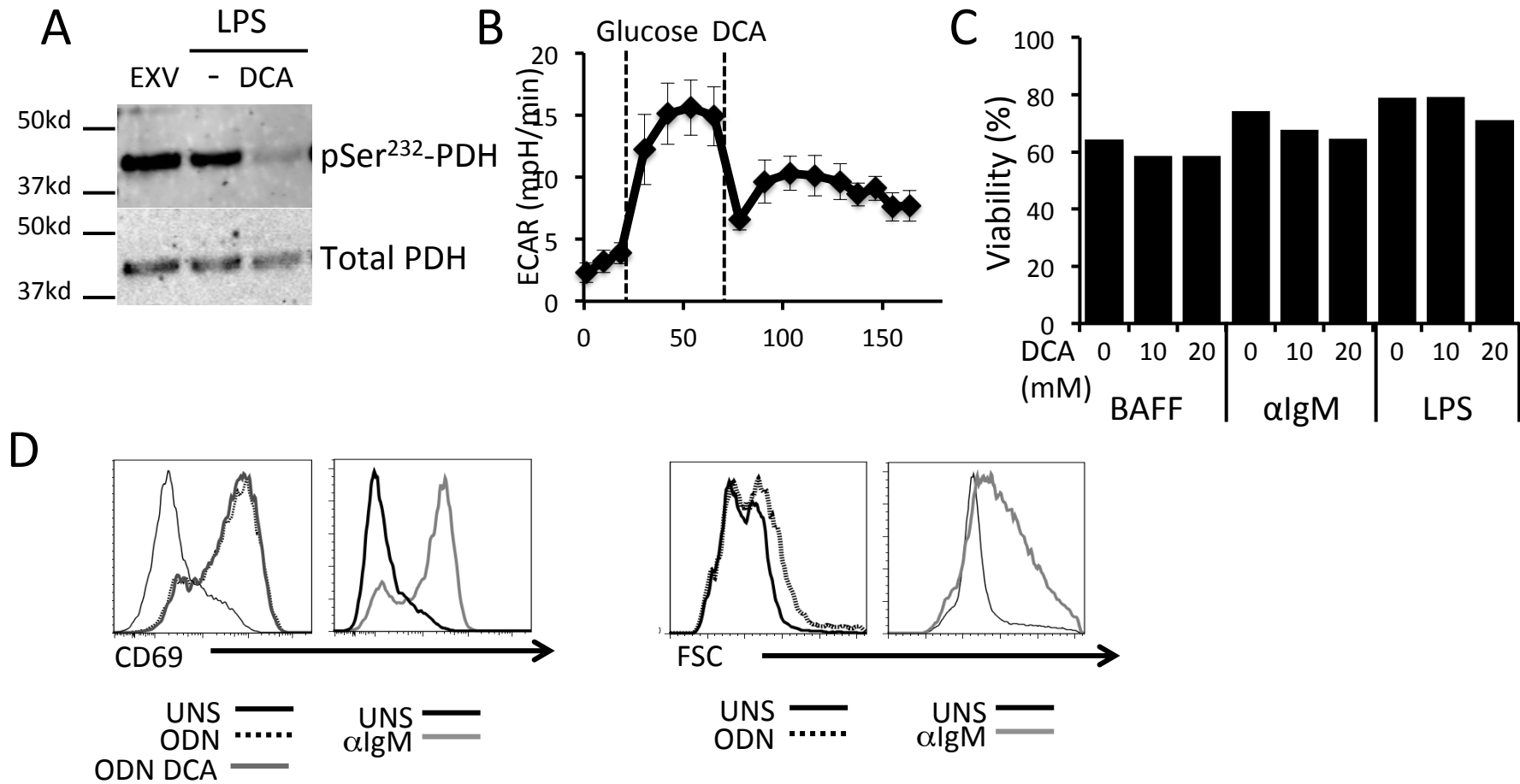


Figure S3. DCA suppresses lactate production but does not affect B cell survival or activation. A. Immunoblot of purified B cells that were unstimulated or stimulated with LPS for 24 hours alone or with addition of DCA (10 mM). **B.** Representative ECAR plot of LPS stimulated B cells with addition of DCA. **C.** Purified B cells were unstimulated or cultured with LPS for 16 hours alone or with addition of DCA at indicated doses and cell viability was determined. **D.** Purified human B cells were stimulated with ODN or anti-IgM alone or with addition of DCA and induction of the activation marker CD69 and cell size (FSC) were measured by flow cytometry. Representative data of 3 or more independent experiments and means are shown.

Supplemental Figure 4

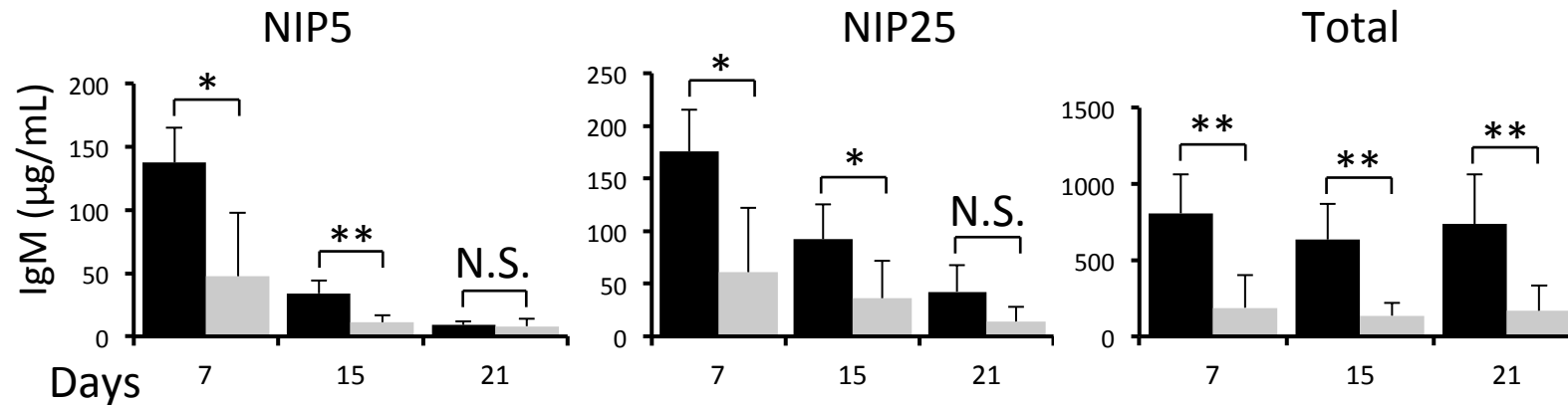


Figure S4. Glut1-deficiency reduces antibody production over time. Control (Glut1+/+) and Glut1fl/fl CD19-Cre mice were immunized with NP-CGG. At indicated days, sera were examined by ELISA to measure total and NP-reactive NIP specific antibody on plates coated with NIP5-BSA to measure high affinity, NIP25-BSA to measure low affinity IgM. Representative data of 3 or more independent experiments and means and standard deviations are shown. Statistical significance was determined by Student's T test (* $p \leq 0.05$, ** $p \leq 0.005$, N.S. not significant).