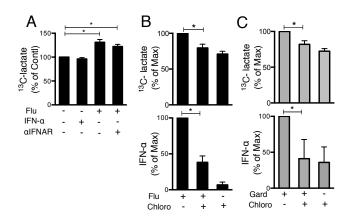


SUPPLEMENTAL FIGURE 1. Viral exposure upregulates key glycolytic genes, increases ATP content and activates HIF-1 $\alpha$  in human pDCs. (A) Total RNA was purified from pDCs treated with or without Flu for 8 h and DNA microarray analysis was performed using the HumanHT-12 v4 Expression BeadChip. Microarray data deposited in GEO database, accession # GSE68849 (http:// www.ncbi.nlm.nih.gov/geo/query/acc.cgi?token=qfarmocyrvcdvsb&acc=GSE68849). Raw data was normalized using quantile normalization. Significantly altered genes (paired t-test,  $p \le 0.05$ ) were further subjected to pathway analysis using Database for Annotation, Visualization and Integrated Discovery. The graph displays differentially expressed genes grouped into functional pathways based on annotation analysis. (B) Normalized expression values of HK2, LDHA and HIF-1 $\alpha$  genes are shown. (C) qRT-PCR results showing relative expression of HK2, LDHA and HIF-1 $\alpha$  to HPRT in pDCs exposed to Flu, RV or gardiquimod for 8 and 24 h. (D) ATP concentration was measured in the lysates of pDCs exposed to Flu or RV or no virus (control) ex vivo for 24 h using an ATP luciferase assay kit. ATP levels were normalized to control conditions. pDCs were stained with HIF-1a Dyl-488 or rabbit IgG isotype control-488 Ab and DAPI after 24 h incubation with or without Flu. (E) Total HIF-1α expression, shown as percent of control (based on mean fluorescence gated on total live pDCs). (F) pDC images displaying nuclear DAPI and HIF-1α or isotype staining. Images represent 1 of 9 experiments. (G) Summary of HIF-1α nuclear translocation in control versus Flu-treated pDCs. Data represent mean  $\pm$  SEM, N=4-6 in A-C; N=3 in D and N=9 in E and G; \*p  $\leq$  0.05, paired t-test.



**SUPPLEMENTAL FIGURE 2.** Flu-induced glycolysis in pDCs is independent of type I IFN signaling. (**A**) pDCs were exposed to IFN- $\alpha$  (1000 U/ml; PBL Assay Science), Flu (MOI 0.1), or Flu in the presence anti-human IFNAR monoclonal Ab (5 μg/ml; PBL Assay Science) for 24 h. <sup>13</sup>C-lactate in pDC supernatants was quantified by mass spectrometry and normalized to the control condition. The effect of chloroquine (2 μg/ml; Sigma-Aldrich) on (**B**) Flu- and (**C**) gardiquimod-treated pDC <sup>13</sup>C-lactate and IFN- $\alpha$  concentrations is shown. Data were normalized to maximal lactate and IFN- $\alpha$  induction. Data represent mean ± SEM, N=3-4. \*p ≤ 0.05, Two-way ANOVA followed by Tukey's test, # represents not detected.