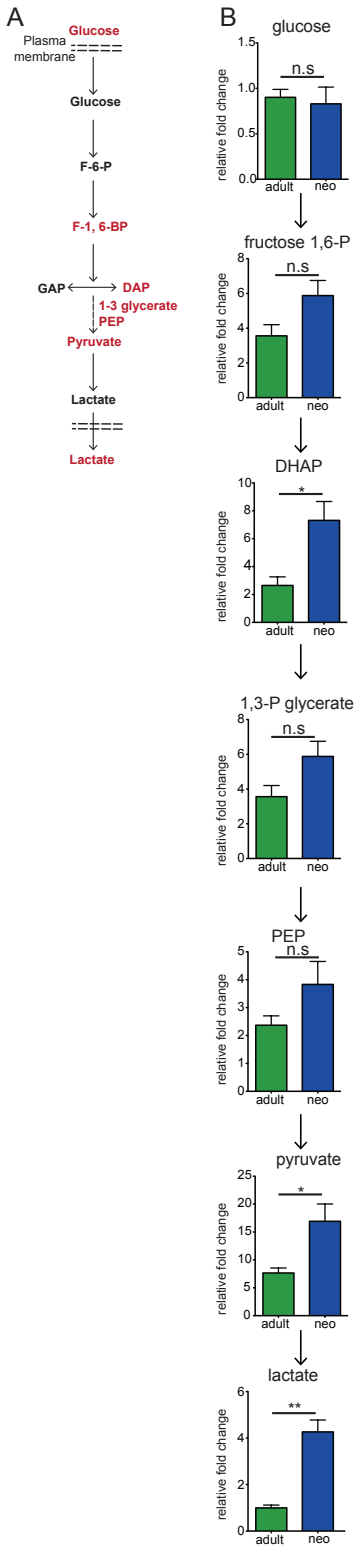
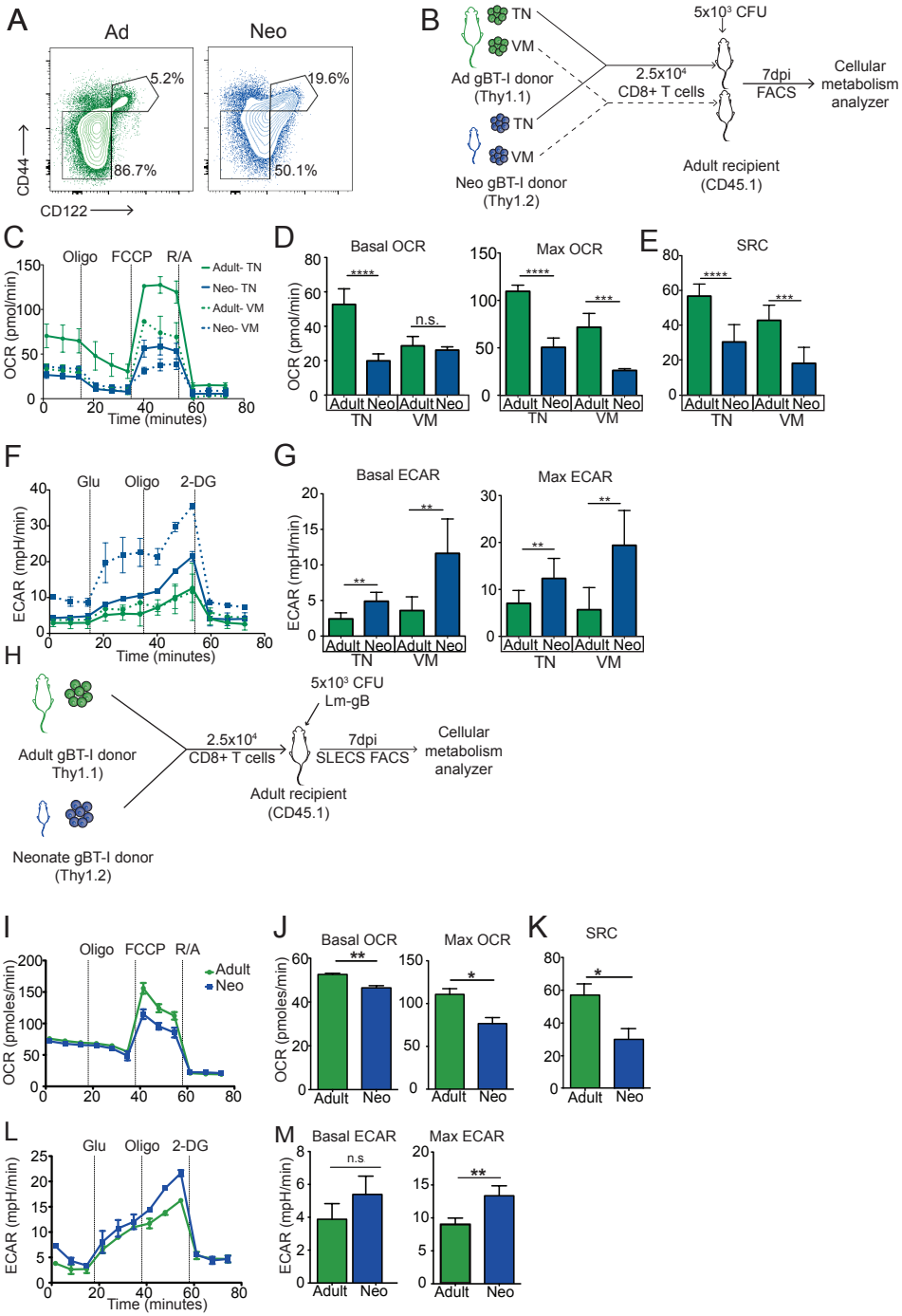
Supplemental Data:



Supplemental Fig 1. Measurements of metabolites in OXPHOS and glycolytic pathways post-activation *in vitro*. (a) Pathway of critical metabolites in glycolysis. **(b)** Metabolomics was performed on adult and neonatal gBT-I CD8+ T cells 18-hour post-activation *in vitro*. Data has been normalized to measurements collected prior to stimulation. Significance was determined by student *t* test. Data representative of two independent experiments with 3 biological replicates/group. $*P < .05$ and $**P < .005$.



Supplemental Fig 2. Metabolic programs are governed by cell intrinsic factors. (**a**) Representative contour plots of the TN and VM populations in uninfected adult and neonatal mice. (**b**) The experimental design to examine if the starting phenotype plays a deterministic role in metabolic programs (**c**) OCR measurements (**d**) Basal and max OCR values, (**e**) SRC values in mice at 7 dpi from a mitochondria stress test (**f**) ECAR measurements, (**g**) basal and max ECAR values from a glycolysis stress test at 7 dpi . Data are representative of two independent experiments. **(h)** Schematic of the experimental design to examine if the effector phenotype influences metabolic differences between neonatal and adult T cells (**i**) OCR measurements, (**j**) Basal and max OCR, (**k**) SRC values in adult and neonatal SLECs during a Mitochondrial Stress Test at 7 dpi (**l**) ECAR measurements, (**m**) Basal and max ECAR values of adult and neonatal CD8+ T cells during a Glycolysis Stress Test at 7 dpi. Data representative of 2-4 independent experiments with 3 biological replicates/group. * $p<0.05$, ** $p<0.005$, *** $p<0.0005$, **** $p<0.00005$ by an a two-way ANOVA followed by a Tukey post-hoc test (C-G) and an unpaired student t-test (I-M).