

Figure S1

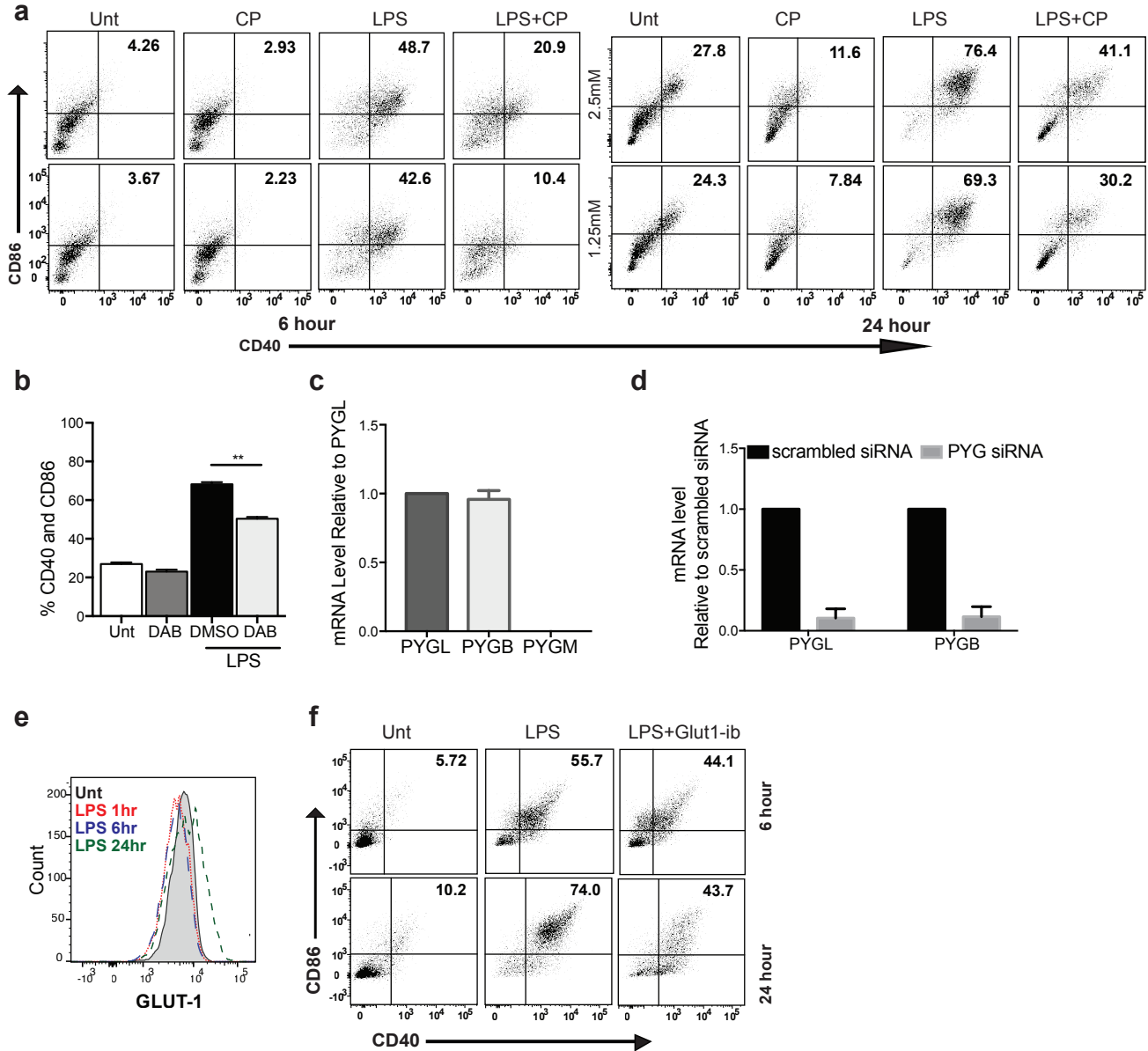


Figure S1. (related to Figure 1 and Figure 2)

(a) BMDCs stimulated with LPS+/-CP for 6 and 24hours in indicated glucose concentrations were analyzed for CD40 and CD86 surface expression. (b) CD40 and CD86 expression of BMDCs stimulated with LPS+/-DAB for 6hours in normal glucose concentration. (c) mRNA expression of 3 PYG isoforms in moDCs; data normalized to PYGL; n=6. (d) Relative mRNA level for confirmation of knockdown of pygl and pygb by si-RNA transfection of moDCs.(e) Intracellular stain of GLUT-1 expression in BMDCs stimulated for 1, 6, and 24hrs. (f) CD40 and CD86 surface expression of BMDCs stimulated with LPSglut1-ib for 6 and 24hours in normal glucose concentration. (a, e-f) representative of more than 3 experiments. (b) n=4, mean+/-SD, One-way ANOVA with Sidak Post-test,**P=0.0038.

Figure S2

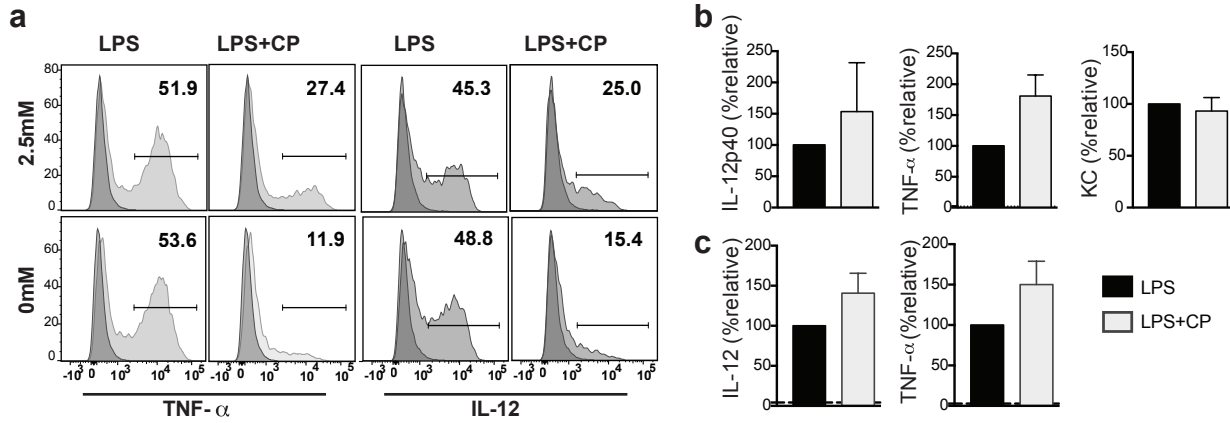


Figure S2. (related to Figure 3)

(a) Intracellular staining of TNF- α and IL-12 of BMDCs stimulated with LPS+/-CP for 4 hours in 2.5 and 0mM glucose. Data are from one experiment representative of four. (b-c) Multiplex panel of cytokine and chemokine measurements from the supernatant of (b) BMDCs and (c) moDCs activated with LPS+/-CP for 6 hours. Dotted lines represent unstimulated levels. n=4, mean+/-SD, student's t-test.

Figure S3

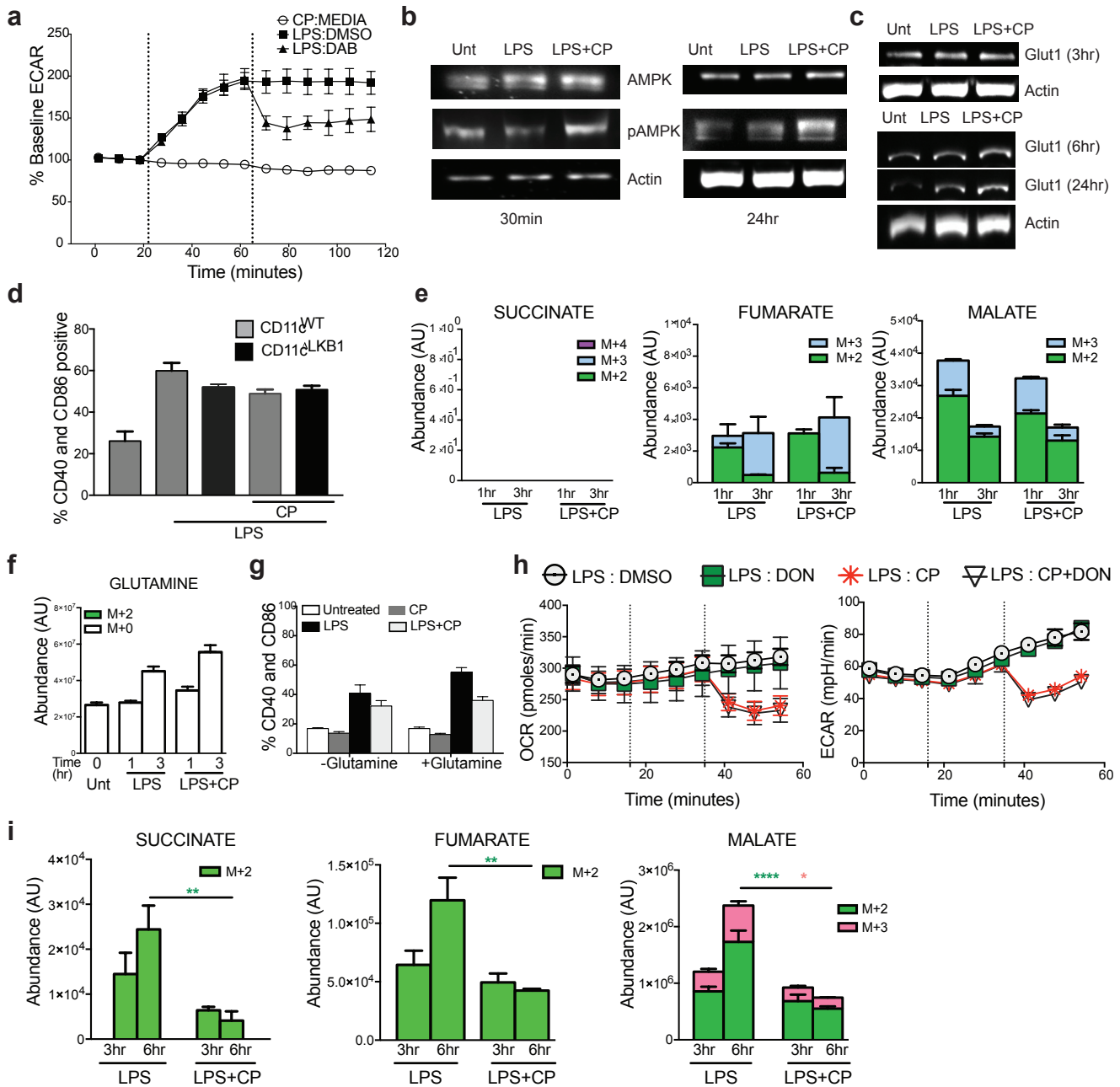


Figure S3. (related to Figure 4).

(a) Real-time changes in ECAR of BMDCs using an alternate PYGL inhibitor, DAB; treatments introduced at dotted lines (1st injection: 2nd injection). Representative of 3 experiments. (b) Protein expression of AMPK and pAMPK in BMDCs stimulated with LPS+/-CP for 30 minutes and 24hrs in normal glucose. (c) Protein expression of Glut-1 in BMDCs stimulated with LPS+/-CP for 3, 6, and 24hours in normal glucose. (d) Surface expression of CD40 and CD86 of BMDCs from WT or LKB1^{-/-} mice stimulated with LPS+/-CP for 6 hrs. Data represents replicates n=3. mean+/-SD. (e,f) BMDCs differentiated in 13C6 -glucose were switched to normal glucose at the time of stimulation with LPS+/-CP for 1 and 3hrs and detected by LC-MS spectrometry. Color bars denote heavy (13C6glucose) whereas white bars represent light 12C glucose. (e)13C6 glucose not detected in succinate after stimulation. (g) CD40 and CD86 expression was analyzed in BMDCs stimulated for 6hours with LPS+/-CP in the presence or absence of glutamine in the medium. n=6 (h) Real-time OCR and ECAR with CP, glutaminolysis inhibitor (DON), or combination; treatment injected at dotted lines (1st injection : 2nd injection). (i) Inverse metabolite tracing of b and c, where BMDCs differentiated in normal light glucose were switched to 13C6-glucose medium at the time of stimulation with LPS+/-CP for 3 and 6hrs and selected TCA intermediates were shown. Data represents n=4, meanSD, Two-way ANOVA with Tukey-Posttest. *P=0.019, **P<0.0039, and ****P<0.0001.

Figure S4

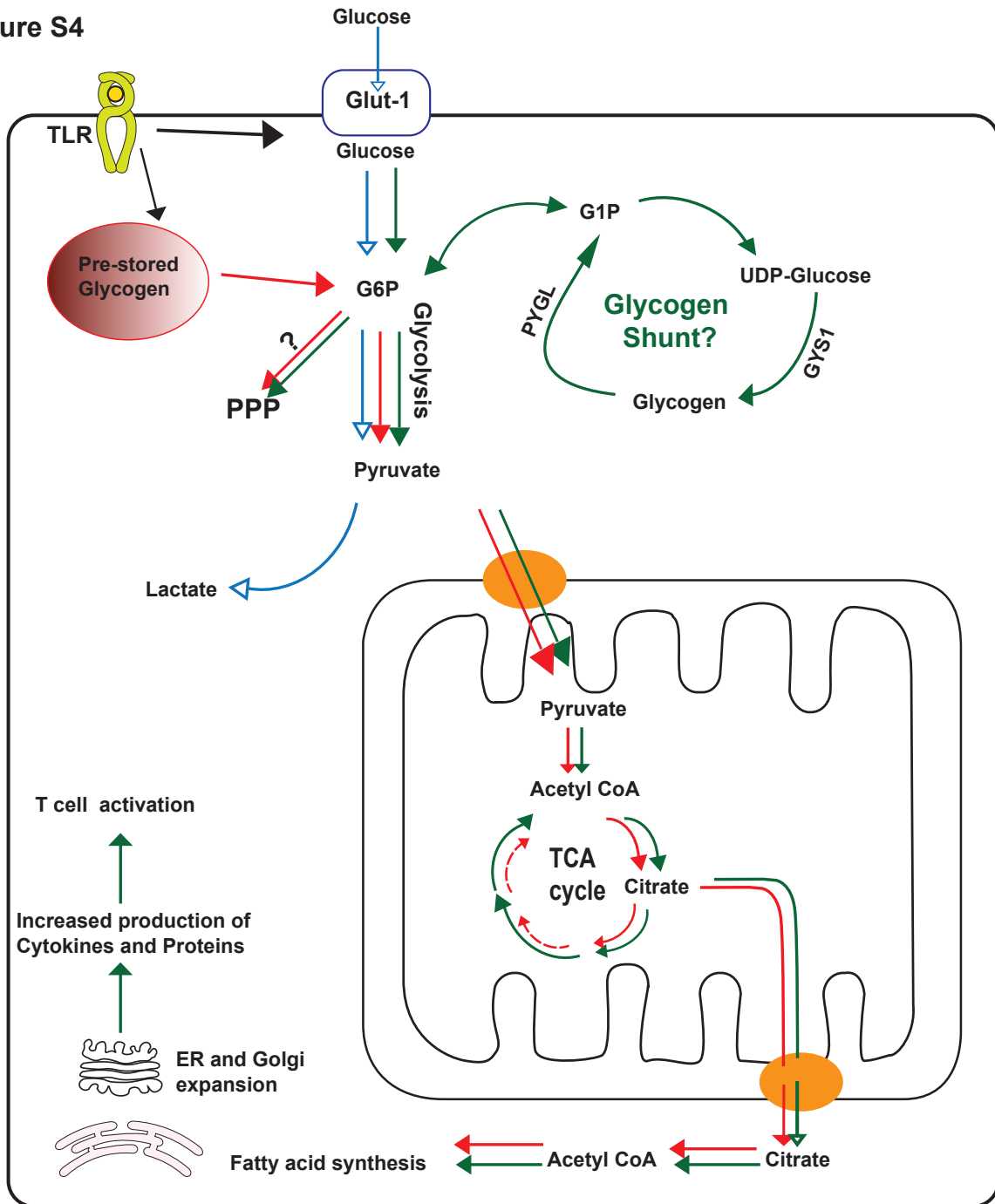


Figure S4. (related to Figure 4)

Proposed Model: Pathway 1 (red) represents the catabolism of basal glycogen stores primarily driving citrate generation. Pathway 2 (blue) represent the catabolism of free glucose which primarily supports the formation of intracellular lactate. Pathway 3 (green) represents glycogen shunt activity, which primarily supports citrate production and a full TCA cycle. PPP=Pentose phosphate pathway