SUPPLEMENTARY FIGURES

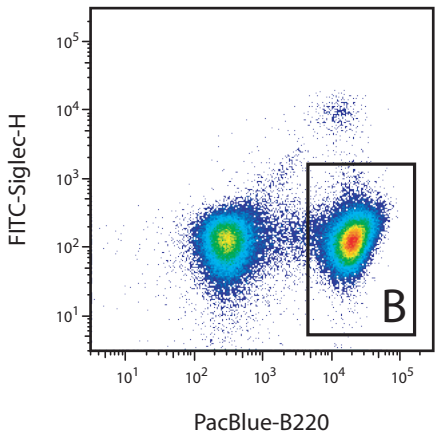
Supplementary Figure 1. *Leukocyte gating strategy.* Representative data and gates are shown for the described experiments.

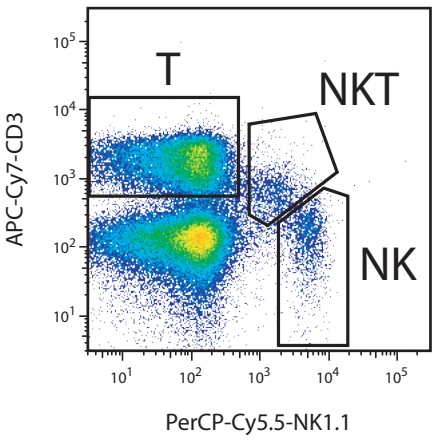
Supplementary Figure 2. *Functional analysis of nodes identifies distinct biological processes*. The data from each node were subject to 3 functional analyses: gene ontology (using EASE), pathway analysis (Pathway Express), and lexical analysis (LACK). The statistical measures for the analyses are Bonferroni-corrected *p* for gene ontology, corrected gamma *p* for Pathway Express, and binomial *p* for LACK. Interferon-associated responses are shown in green, MHC class I-associated responses in blue, and NK cell-associated responses in red.

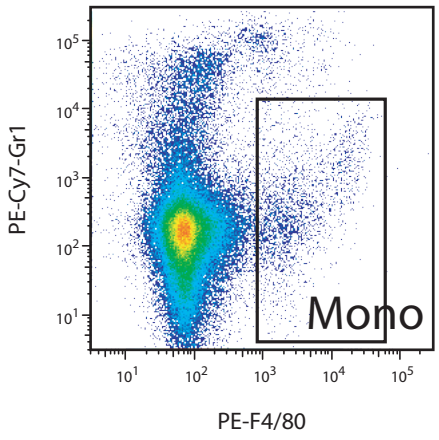
Supplementary Figure 3. *Absolute leukocyte counts*. Blood was harvested into EDTA tubes and a 100 ul aliquot was treated with RBC lysis buffer, washed, and resuspended in 50 ul PBS. 10 ul was added to 40 ul trypan blue and leukocytes were counted on a hemacytometer. Isolated spleens were homogenized in 10 ml PBS, and 5 ul was added to 45 ul trypan blue and leukocytes were counted on a hemacytometer. Data are presented as means with error bars representing standard deviations for triplicate mice. Statistical significance was assessed using an unpaired two-tailed *t*-test assuming unequal variances and a *p*-value threshold of 0.05 (represented by the star).

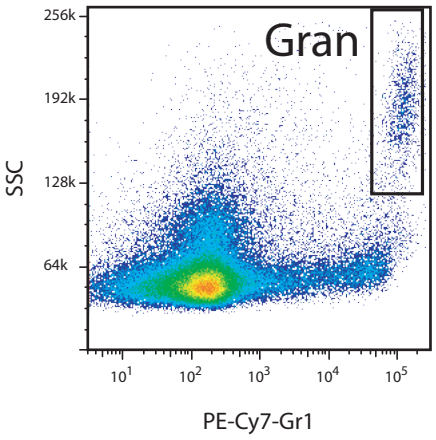
Supplementary Figure 4. *Absolute leukocyte counts in the blood.* Absolute leukocyte counts were calculated using frequency data and multiplying it by the mean absolute counts in each corresponding data point represented in Figure 2. Day 0 data was used for all mock-infected samples. Data are presented as means with error bars representing standard deviations. Statistical significance was assessed using an unpaired two-tailed *t*-test assuming unequal variances and a *p*-value threshold of 0.05 (represented by stars).

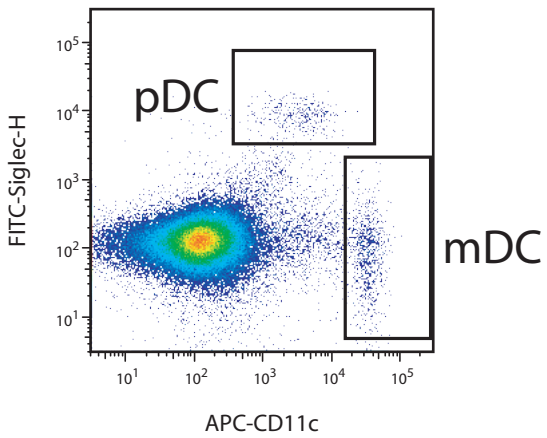
Supplementary Figure 5. *Absolute leukocyte counts in the spleen.* Methods and data are as described in Supplementary Figure 3, but for spleen.


FITC-Siglec-H
PacBlue-B220
B

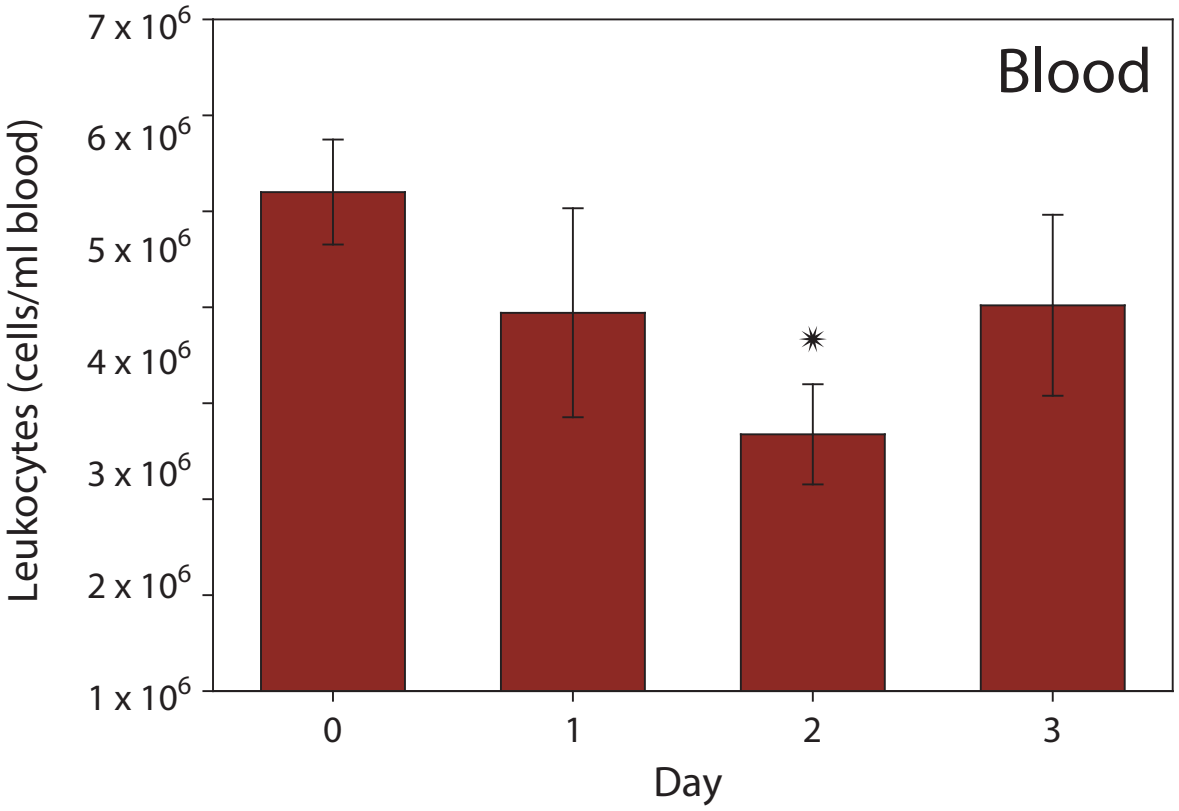

APC-Cy7-CD3
PerCP-Cy5.5-NK1.1
T
NKT
NK

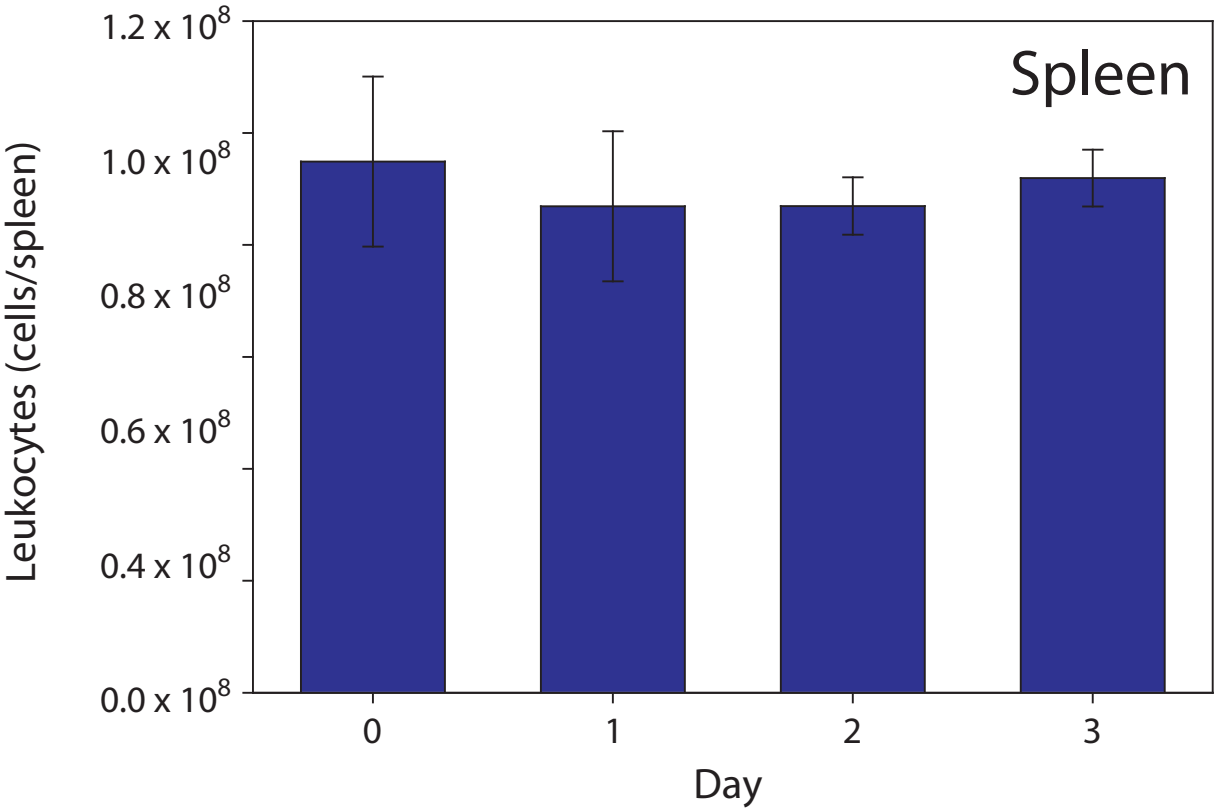

PE-Cy7-Gr1
PE-F4/80
Mono

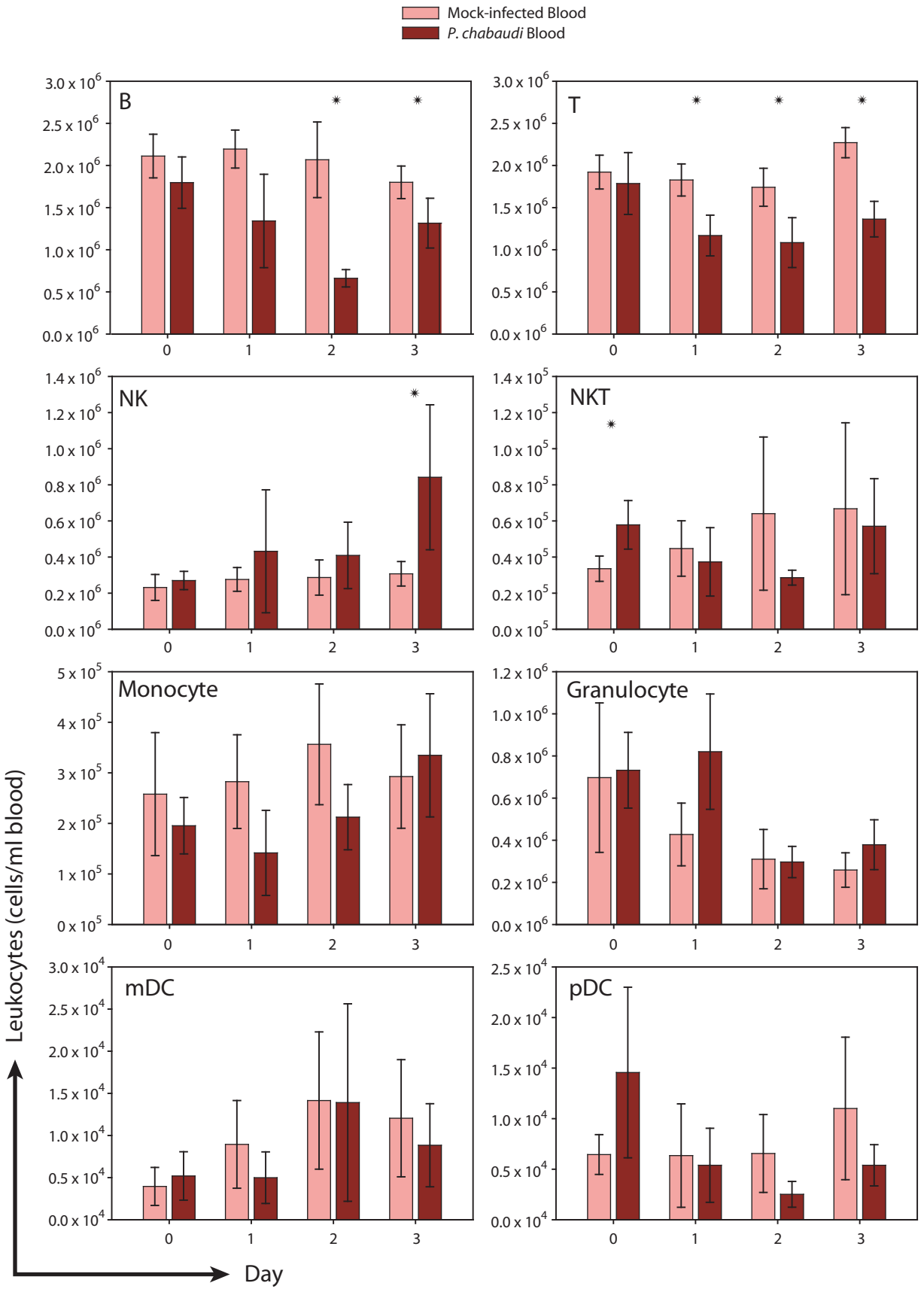

SSC
PE-Cy7-Gr1
Gran

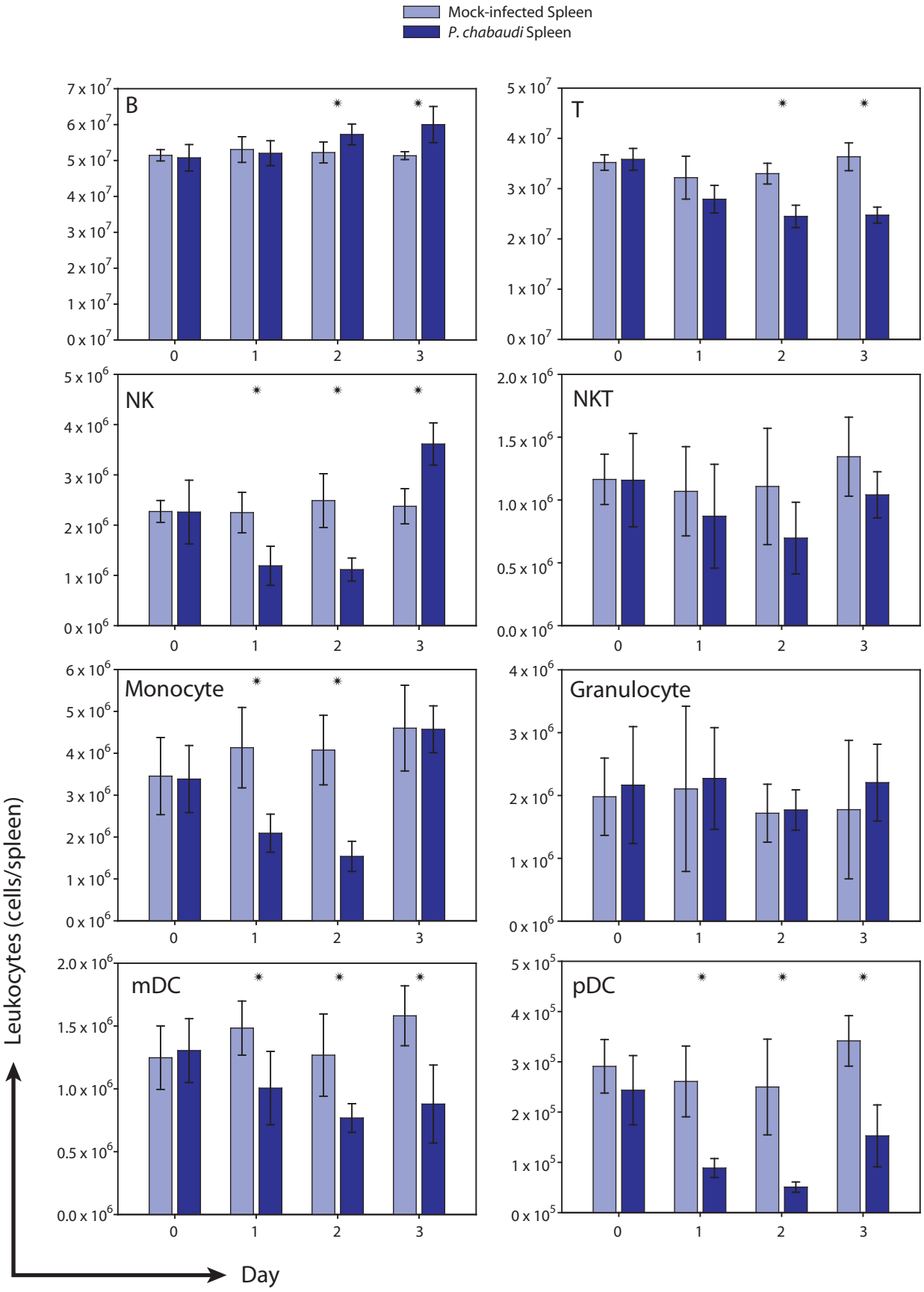

FITC-Siglec-H
APC-CD11c
pDC
mDC

	GO Category	p	KEGG Pathway	p	Term	p
Early	defense response	4.24×10^{-21}			interferon	$<1.00 \times 10^{-10}$
	response to biotic stimulus	2.81×10^{-20}			oligoadenylate	$<1.00 \times 10^{-10}$
	immune response	8.91×10^{-19}	Toll-like receptor signaling pathway	4.51×10^{-5}	guanylate	1.64×10^{-5}
	response to external stimulus	1.32×10^{-15}	Cytokine-cytokine receptor interaction	1.06×10^{-3}	schlafen	4.57×10^{-5}
	response to pest/pathogen/parasite	3.32×10^{-3}	Jak-STAT signaling pathway	1.10×10^{-2}	antigen	5.87×10^{-5}
	signal transducer activity	8.37×10^{-3}			GTPase	1.39×10^{-4}
	cytokine activity	4.97×10^{-2}			tetratricopeptide	3.36×10^{-4}
					chemokine	2.99×10^{-3}
					interleukin	4.68×10^{-3}
Intermediate	defense response	8.09×10^{-36}				
	response to biotic stimulus	6.37×10^{-33}				
	immune response	2.65×10^{-24}				
	response to external stimulus	1.93×10^{-23}				
	signal transducer activity	1.92×10^{-16}				
	receptor activity	3.63×10^{-11}				
	response to pest/pathogen/parasite	1.99×10^{-5}			killer	$<1.00 \times 10^{-10}$
	sugar binding	2.69×10^{-5}			lectin	$<1.00 \times 10^{-10}$
	carbohydrate binding	5.14×10^{-5}	Type I diabetes mellitus	2.10×10^{-7}	histocompatibility	9.88×10^{-8}
	cytokine activity	2.07×10^{-4}	Natural killer cell mediated cytotoxicity	3.10×10^{-7}	eosinophil	5.54×10^{-6}
	heterophilic cell adhesion	7.94×10^{-4}	Antigen processing and presentation	4.05×10^{-5}	platelet	1.14×10^{-4}
	chemokine activity	2.17×10^{-3}	Cell adhesion molecules (CAMs)	3.16×10^{-3}	chemokine	1.88×10^{-4}
	chemokine receptor binding	2.17×10^{-3}	Cytokine-cytokine receptor interaction	3.50×10^{-3}	interferon	1.03×10^{-3}
	G-protein-coupled receptor binding	2.17×10^{-3}			antigen	9.60×10^{-3}
	response to wounding	4.65×10^{-3}				
	chemoattractant activity	6.54×10^{-3}				
	cell-cell adhesion	2.08×10^{-2}				
	extracellular space	2.37×10^{-2}				
	antigen processing, endogenous via MHC class I	2.76×10^{-2}				
	antigen presentation, endogenous antigen	4.88×10^{-2}				
Late	defense response	1.50×10^{-42}				
	response to biotic stimulus	3.41×10^{-39}				
	immune response	2.97×10^{-30}				
	response to external stimulus	3.81×10^{-28}				
	signal transducer activity	3.69×10^{-17}				
	receptor activity	1.22×10^{-11}				
	response to pest/pathogen/parasite	1.09×10^{-10}				
	extracellular space	4.76×10^{-7}				
	cytokine activity	1.03×10^{-6}				
	sugar binding	1.05×10^{-6}				
	carbohydrate binding	2.52×10^{-6}				
	response to wounding	2.79×10^{-6}				
	extracellular	3.11×10^{-6}			stefin	4.53×10^{-7}
	taxis	2.06×10^{-4}			lg	1.36×10^{-4}
	chemotaxis	2.06×10^{-4}	Cytokine-cytokine receptor interaction	1.37×10^{-2}	cathepsin	1.48×10^{-3}
	heterophilic cell adhesion	3.22×10^{-4}	Complement and coagulation cascades	4.77×10^{-2}	chemokine	4.21×10^{-3}
	chemokine receptor binding	4.27×10^{-4}			antigen	2.33×10^{-2}
	chemokine activity	4.27×10^{-4}			interleukin	3.77×10^{-2}
	G-protein-coupled receptor binding	4.27×10^{-4}				
	inflammatory response	7.42×10^{-4}				
	innate immune response	1.17×10^{-3}				
	chemoattractant activity	1.81×10^{-3}				
	plasma membrane	1.86×10^{-3}				
	cytolysis	2.02×10^{-3}				
	transmembrane receptor activity	2.62×10^{-3}				
	integral to membrane	1.10×10^{-2}				
	membrane	1.12×10^{-2}				
	cell-cell adhesion	3.04×10^{-2}				
	response to chemical substance	3.32×10^{-2}				


Blood
Leukocytes (cells/ml blood)
7 x 10^6
6 x 10^6
5 x 10^6
4 x 10^6
3 x 10^6
2 x 10^6
1 x 10^6
0
1
2
3
Day


Spleen
Leukocytes (cells/spleen)
1.2 x 10^8
1.0 x 10^8
0.8 x 10^8
0.6 x 10^8
0.4 x 10^8
0.0 x 10^8
0
1
2
3
Day


Mock-infected Blood
P. chabaudi Blood
B
T
NK
NKT
Monocyte
Granulocyte
mDC
pDC
Leukocytes (cells/ml blood)
Day


Mock-infected Spleen
P. chabaudi Spleen
B
T
NK
NKT
Monocyte
Granulocyte
mDC
pDC
Leukocytes (cells/spleen)
Day