Supplemental figures

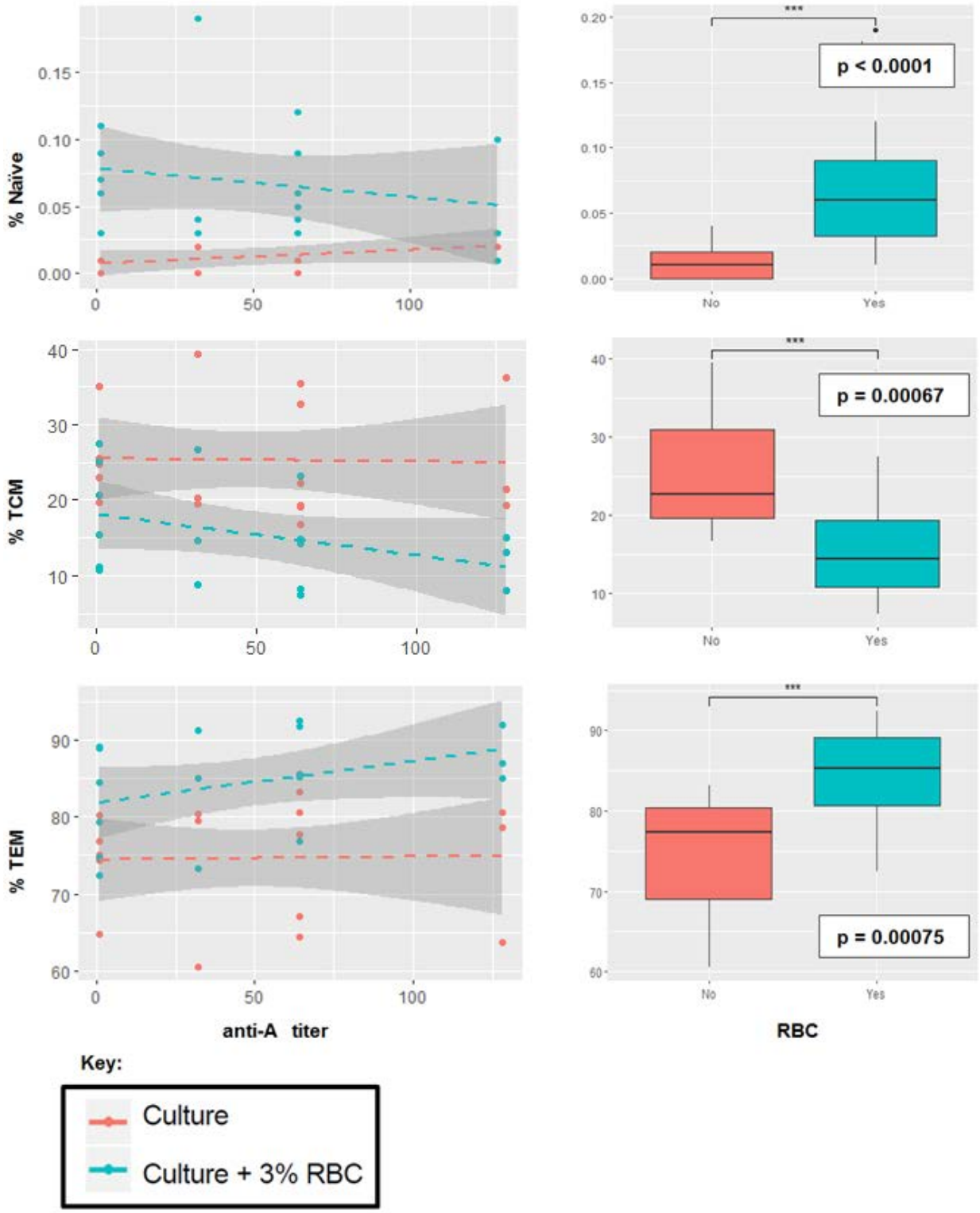
Appendix S1. Additional phenotypic variables by anti-A titer. Left column shows scatterplots of % naïve, % T_{CM}, % T_{EM} by anti-A titer with a best fit line by presence/absence RBC contamination. Anti-A titer revealed no appreciable effect on naïve, T_{CM}, or T_{EM} percentage. Right column shows boxplots of % naïve, % T_{CM}, % T_{EM} by presence/absence of RBC contamination. P-values are shown within inset boxes on each respective boxplot.

Appendix S2. Most upregulated and downregulated transcripts/pathways in cultures with RBC contamination

Appendix S3. Cytokine and chemokine expression in cultures with and without RBC contamination. Hierarchical clustering showing 10 differently expressed analytes in cultures with and without RBC contamination. Violet and green lines on the tree represent cultures with and without 3% RBC spike, respectively.

Appendix S4. RBC agglutination in cultures grown in the presence of high-titer O plasma. A) Macroscopic RBC agglutination is visible within the culture bag on day 7 in a culture supplemented with plasma containing an anti-A titer of 128. B) Microscopically, agglutination of intact RBCs (clustered, red, biconcave cells) is seen; lymphocytes (clear, round cells) continue to expand evenly across the field.

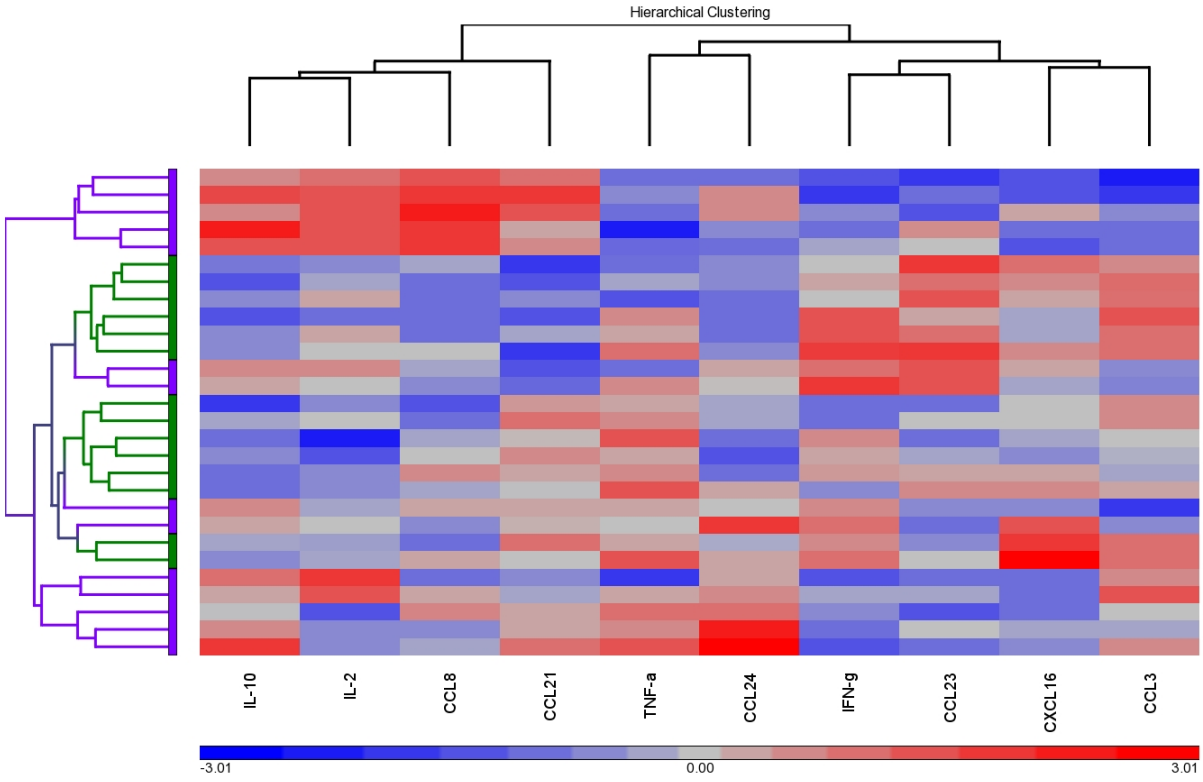
Appendix S1


% Naïve
% TCM
% TEM
anti-A titer
RBC
No
Yes
p < 0.0001
p = 0.00067
p = 0.00075
***
Key:
Culture
Culture + 3% RBC

Appendix S2

Upregulated	Downregulated
Phagosome Maturation	Cell Cycle Control of Chromosomal Replication
Activation of IRF by Cytosolic Pattern Recognition Receptors	Mismatch Repair in Eukaryotes
Endoplasmic Reticulum Stress Pathway	Hereditary Breast Cancer Signaling
Interferon Signaling	tRNA Charging
Assembly of RNA Polymerase II Complex	Role of BRCA1 in DNA Damage Response
Estrogen Receptor Signaling	Cell Cycle: G2/M DNA Damage Checkpoint Regulation
Th1 and Th2 Activation Pathway	Superpathway of Cholesterol Biosynthesis
Phosphatidylethanolamine Biosynthesis II	Small Cell Lung Cancer Signaling
EIF2 Signaling	Parkinson's Signaling
Eicosanoid Signaling	Superpathway of Serine and Glycine Biosynthesis I
Polyamine Regulation in Colon Cancer	Pyrimidine Deoxyribonucleotides De Novo Biosynthesis I
Th2 Pathway	Cholesterol Biosynthesis I
Clathrin-mediated Endocytosis Signaling	Cholesterol Biosynthesis II (via 24,25-dihydrolanosterol)
Natural Killer Cell Signaling	Cholesterol Biosynthesis III (via Desmosterol)
Mitochondrial Dysfunction	DNA damage-induced 14-3-3σ Signaling
Complement System	Folate Transformations I
Huntington's Disease Signaling	Antiproliferative Role of TOB in T Cell Signaling
Autophagy	Serine Biosynthesis
Assembly of RNA Polymerase I Complex	dTMP De Novo Biosynthesis
Protein Ubiquitination Pathway	p53 Signaling
Rac Signaling	ATM Signaling
Tumoricidal Function of Hepatic Natural Killer Cells	Epoxysqualene Biosynthesis
Glucocorticoid Receptor Signaling	Cysteine Biosynthesis/Homocysteine Degradation
Hematopoiesis from Multipotent Progenitor Cells	IL-4 Signaling
PI3K Signaling in B Lymphocytes	Role of Tissue Factor in Cancer
B Cell Receptor Signaling	Mitotic Roles of Polo-Like Kinase
Death Receptor Signaling	Ovarian Cancer Signaling
Lipid Antigen Presentation by CD1	Pancreatic Adenocarcinoma Signaling
Glycoaminoglycan-protein Linkage Region Biosynthesis	Docosahexaenoic Acid (DHA) Signaling
NF-κB Activation by Viruses	EGF Signaling

Appendix S3


Hierarchical Clustering
IL-10
IL-2
CCL8
CCL21
TNF-a
CCL24
IFN-g
CCL23
CXCL16
CCL3
-3.01
0.00
3.01

Appendix S4