Supplementary Information

$CD8^+$ T cell activation by murine erythroblasts infected with malaria parasites

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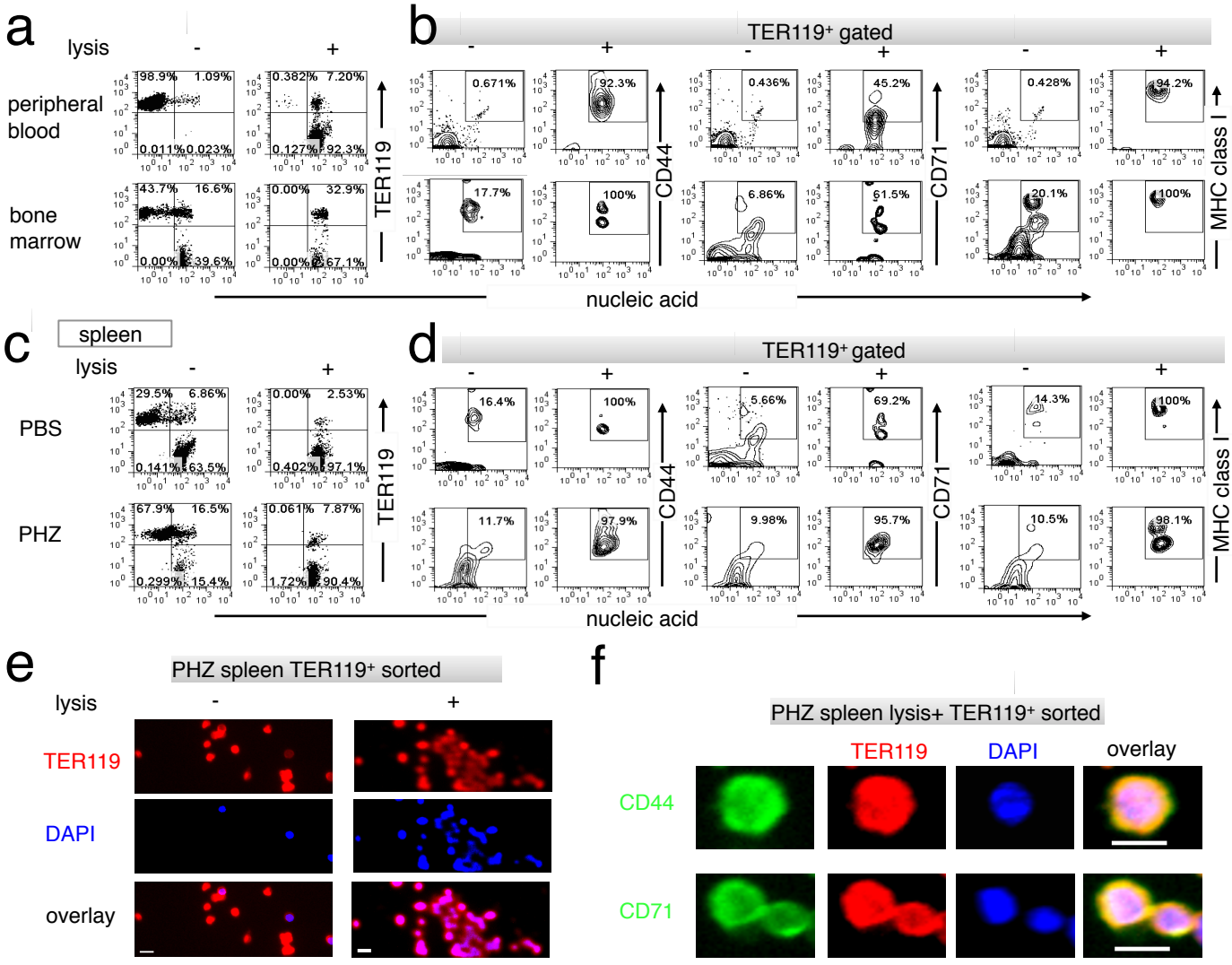
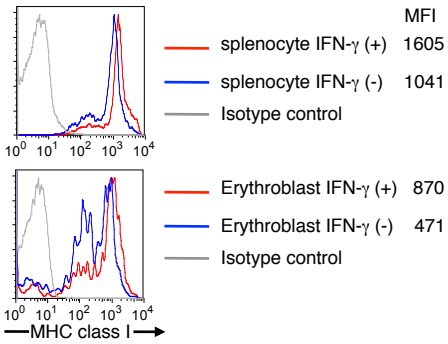


Supplementary Figure 1

Phenotypic characteristics of erythroblasts. Peripheral blood, bone marrow (a, b), and spleen cells (c-f) were analyzed using flow cytometry or fluorescence microscopy before and after lysis. (a) TER119 and nucleic acid were detected in peripheral blood and bone marrow cells. (b) Expression of CD44, CD71 and MHC class I in TER119$^+$ cells was analyzed. In the peripheral blood, TER119$^+$ nucleic acid-containing cells were observed before or after lysis, and were reticulocytes or erythroblasts that contained residual RNA or CD44$^+$, respectively. (c, d) Spleen cells from mice treated with 50 mg/kg body weight of PHZ that was used to induce hemolytic anemia were analyzed as in A and B. (e, f). Splenic TER119$^+$ cells sorted from mice treated with PHZ were stained with PE-labeled anti-TER119, DAPI, FITC-anti-CD44 or FITC–anti-CD71. Scale bars represent 10 μm. Data are from one representative of at least two independent experiments.



Supplementary Figure 2

IFN-γ upregulated expression of MHC class I on erythroblasts. Erythroblasts were induced in mouse treated with 50 mg/kg weight of PHZ on Day -3. Splenocytes (5×10^5 cells) were co-cultured with or without 10 ng/ml of recombinant IFN-γ (Peprotech, NJ, USA) for 24 h at 37 °C in a CO_2 incubator. Cells were Fc-blocked and stained with anti TER119, MHC class I, isotype control for MHC class I and PI. PI negative live cells were analyzed by FACS. Numbers indicate mean fluorescence intensity (MFI).