Supplementary Material

A  Splenic lymphocyte isolation

Male ICR mice
sodium pentobarbital i.p.
Grinding
spleen removed

Density gradient centrifugation

B  Splenic lymphocyte purity identification

RPMI-1640 Lymphocyte Lymphocyte separation solution

CD3 (T cells) CD19 (B cells)

Erythrocyte Other blood cells Dead cell debris
**Supplementary Figure 1.** Splenic lymphocyte isolation and purity identification. A. Splenic lymphocyte isolation: The isolation of primary splenic lymphocytes was performed using mouse lymphocyte separation medium (Dakewe, DKW33-R0400, China). The mice were euthanized, and their bodies were then soaked in 75% ethanol. Then spleen was removed. After the spleen was ground by means of a syringe piston. The suspension was immediately transferred to a centrifuge tube, covered with 1 ml of Roswell Park Memorial Institute-1640 medium (RPMI-1640) and then density gradient centrifugation. Cells with a density at the lymphocyte location are collected. B. Splenic lymphocyte purity identification: Lymphocytes obtained by density gradient centrifugation were labelled by CD3 and CD19. The assay is then performed using a flow cytometer. CD19 is a marker for B lymphocytes. CD3 is a marker for T lymphocytes. CD3-positive T lymphocytes accounted for 36.5%. CD19-positive B lymphocytes accounted for 48.6%. More than 85% of the cells isolated by using this kit are lymphocytes.
Supplementary Figure 2. Pathological changes in the liver after heatstroke. Representative pathological images of liver from sham heated mice (left), heatstroke mice (0 h, middle; 3 h, right) stained with H&E at magnification ×100. At the time of HS (0 h), the body temperature was high (Tc = 43°C), the hepatic sinus is dilated, and some areas of the section are visible with congestion. Three hours after the occurrence of HS (low body temperature period, Tc = 29°C), the slice shows visible sinusoidal dilatation. Neutrophils and mononuclear cells are seen in some areas. The basic structure of liver tissue is relatively intact. In each group, n = 6. H&E, hematoxylin and eosin.