

Supplement: Flow cytometry

The flow experiment steps are as follows:

- (1) three flow cytometry tubes were required for each peripheral blood sample and labeled Tube1, Tube2, and Tube3.
- (2) Different premixed monoclonal antibodies were added to three tubes, and 50 μ L of anticoagulated blood was added to each tube.
- (3) Mix well and incubate at room temperature in the dark for 15 min.
- (4) Add 500 μ L of hemolysin and mix well with vortex shaking and place in the dark for 15 min.
- (5) 1 ml of sheath fluid was added to terminate hemolysis.
- (6) Centrifuge the blood sample at 1500 rpm for 5 min and discard the supernatant.
- (7) resuspended by adding 500 μ L of sheath fluid and analyzed by Beckman Coulter Cytometer FC500 flow cytometry.

Antibodies used for flow cytometry were obtained from BD Biosciences (San Jose, CA, USA) and included CD3-FITC (#555332), CD4-FITC (#550628), CD8-FITC (#555366), CD19-FITC (#555412), CD56-PE (#55664), CD45RO-APC (#559865), CD45RA-PE (#555489), CD38-PE (#555460), FITC/PE/APC isotype controls (#555748; #555749; #555576). Cell Quest software (BD, Franklin Lakes, NJ, USA) was used to analyze the proportion of peripheral blood lymphocyte subsets.