

1. Prepare cells

(1). Collect cells, filter through a 200-mesh sieve and collect the filtrate. Centrifuge at 300×g for 5 min, and discard the supernatant.

(2). Add cell staining buffer [E-CK-A107] (or PBS with 1% BSA) to resuspend the sample.

2. Cell Counting

After counting the suspension with a hemocytometer or other instruments, adjust the cell concentration to about $1 \times 10^7/\text{mL}$.

3. Set Sample and Control

| Groups | Tubes |
|----------|-------------------------|
| Controls | Blank |
| | Single staining control |
| | Isotype control |
| | FMO |
| | Biological control |
| Sample | Experimental sample |

4. Block Fc Receptor

Block Fc receptors may reduce nonspecific immunofluorescent staining.

For Mouse cells: purified Anti-Mouse CD16/CD32 [E-AB-F0997A] antibody specific for FcγR III/II can be used to block nonspecific staining of antibodies. Thus, block Fc receptors by pre-incubating cells with 0.5~1μg Anti-Mouse CD16/CD32 in 100 μL volume for 10 min at room temperature.

For Human and Rat cells: Pre-incubate the cells with excess irrelevant purified Ig from the same species and same isotype as the antibodies used for immunofluorescent staining or serums from the same species as the antibody used.

5. Cell Surface Staining

(1). Add 5 μL corresponding antibody to each sample tube except blank.

(2). Incubate at 4°C for 30 min in the dark.

6. Fixation and Permeabilization

If the markers include those in the nucleus (e.g. Foxp3, STAT3), please refer to the [Cells Intranuclear Targets Staining for Flow Cytometry](#).

- (1). Dilute Fixation and Permeabilization Solution [E-CK-A109] according to the manual.
- (2). Add 2 mL cell staining buffer [E-CK-A107] (or PBS with 1% BSA) to each tube, centrifuge at 300×g for 5 min, and discard the supernatant.
- (3). Add 200 µL cell staining buffer [E-CK-A107] (or PBS with 1% BSA) to resuspend the sample. Intranuclear
- (4). Add 200 µL 1× Fixation Buffer to each tube, mix gently.
- (5). Incubate at RT for 30~60 min in the dark.
- (6). Add 1 mL 1× Permeabilization Working Solution to each tube, centrifuge at 600×g for 5 min, and discard the supernatant.

7. Cell Intracellular Staining

- (1). Add 100 µL 1× Permeabilization Working Solution to each tube, resuspend the sample.
- (2). Add 5 µL corresponding antibody to the tube required.
- (3). Incubate at RT for 30 min in the dark.
- (4). Add 2 mL cell staining buffer [E-CK-A107] (or PBS with 1% BSA) to each tube, centrifuge at 600×g for 5 min, and discard the supernatant.

8. Detection

- (1). Add 200 µL cell staining buffer [E-CK-A107] (or PBS with 1% BSA) to resuspend the sample.
- (2). Adjust instrument parameters, detection.