

## Anti-Human CD3-FITC/CD19-APC/CD16+CD56-PE Cocktail

<b>Catalog No.</b>	E-AB-FC0007	<b>Reactivity</b>	Human
<b>Storage</b>	Store at 2~8°C, Avoid freeze / thaw cycles	<b>Applications</b>	FCM

**Important Note:** Centrifuge before opening to ensure complete recovery of vial contents.

### Antigen Information

#### Background

This product is a FCM antibody cocktail made up of FITC Anti-Human CD3 Antibody [Clone: OKT-3] (Mouse IgG2a,  $\kappa$ ), APC Anti-Human CD19 Antibody [Clone: CB19] (Mouse IgG1,  $\kappa$ ), PE Anti-Human CD16 Antibody [Clone: 3G8] (Mouse IgG1,  $\kappa$ ) and PE Anti-Human CD56 Antibody [Clone: 5.1H11] (Mouse IgG1,  $\kappa$ ).

CD3 is a heterotetrameric protein consisting of a CD3 $\gamma$ , a CD3 $\delta$  and 2 CD3 $\epsilon$ . It forms complex with TCR. OKT-3 recognize human CD3 $\epsilon$ . Human CD3 is expressed on the surface of T cells and NKT cells.

CD19 is a single-chain transmembrane glycoprotein expressed on B cells of all stages except plasma cells. It is a common marker for B cells. CD19 is also expressed in follicular dendritic cells. It forms complex with CD21 and CD84, which forms co-receptor with BCR. It takes part in B cell development, activation and differentiation.

CD16 is a low affinity receptor for the Fc of IgG. Human CD16 has two isoforms, CD16a and CD16b. CD16a is expressed on NK cells, activated monocytes and macrophages. CD16b is expressed on neutrophils. NK cells exert the function of ADCC by binding Fc of IgG through CD16.

CD56 is also called neural cell adhesion molecule (NCAM), expressed on neurons, glia and skeletal muscle cells. In hematopoietic cells, CD56 is also expressed on NK cells and NKT cells. CD56 can be used to detect NK cells,  $\gamma/\delta$  T cells and activated CD8+ cells.

### Product Details

<b>Size</b>	20Tests/100Tests/100Tests×2
<b>Clone No.</b>	OKT-3,CB19,3G8,5.1H11
<b>Reactivity</b>	Human
<b>Application</b>	FCM
<b>Storage Buffer</b>	Phosphate buffered solution, pH 7.2, containing 0.09% stabilizer and 1% protein protectant.
<b>Shipping</b>	Biological ice pack at 4 °C
<b>Stability &amp; Storage</b>	Keep as concentrated solution. Store at 2~8°C and protected from prolonged exposure to light. Do not freeze. This product is guaranteed up to one year from purchase.

### For Research Use Only

## Fluorophore

**Conjugation:** FITC,APC,PE

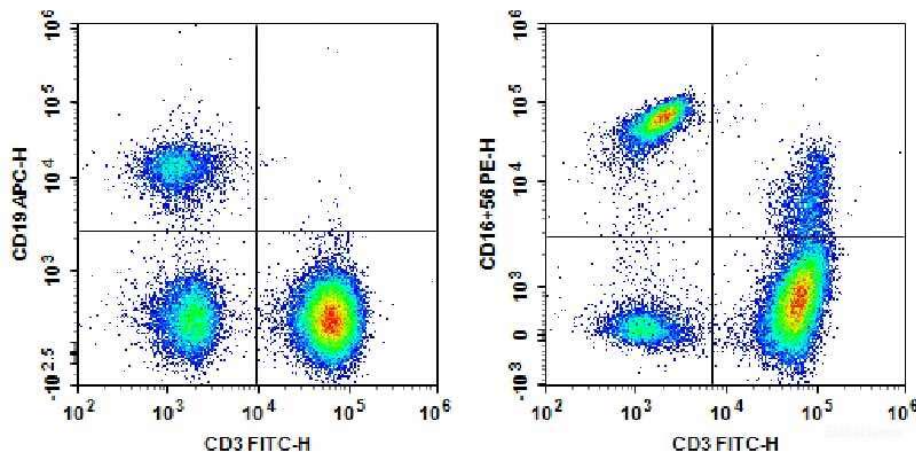
FITC is designed to be excited by the Blue laser (488 nm) and detected using an optical filter centered near 530 nm (e.g., a 525/40 nm bandpass filter). APC is designed to be excited by the Red (627-640 nm) laser and detected using an optical filter centered near 660 nm (e.g., a 660/20 nm bandpass filter). PE is designed to be excited by the Blue (488 nm), Green (532 nm) and Yellow-Green (561 nm) lasers and detected using an optical filter centered near 575 nm (e.g., a 585/42 nm bandpass filter).

## Recommended usage

For whole blood samples, add 5  $\mu$ L Anti-Human CD3-FITC/CD19-APC/CD16+CD56-PE Cocktail to 100  $\mu$ L anticoagulant-treated blood sample. Mix and incubate the sample at 4°C in the dark for 30 min. Remove red blood cells with RBC lysis solution following the manufacturer's instruction. Wash the cell with cell staining buffer and discard the supernatant after centrifugation at 300 g for 5 min. Resuspend the cells with 200  $\mu$ L cell staining buffer and load the sample on flow cytometer for detection.

For other samples,  $1 \times 10^6$  dissociated single cells are centrifuged at 300 g for 5 min with the supernatant discarded. Resuspend the cells with 100  $\mu$ L cell staining buffer and add 5  $\mu$ L Anti-Human CD3-FITC/CD19-APC/CD16+CD56-PE Cocktail. Mix and incubate the sample at 4°C in the dark for 30 min. Add cell staining buffer to each tube, centrifuge at 300 g for 5 min and discard the supernatant. Resuspend the cells with 200  $\mu$ L cell staining buffer and load the sample on flow cytometer for detection.

## Product data



Human peripheral blood lymphocytes are stained with Anti-Human CD3-FITC/CD19-APC/CD16+CD56-PE.

## Related Information

1. Sample Preparation for Flow Cytometry <https://www.elabscience.com/List-detail-5594.html>
2. Staining Cell Surface Targets for Flow Cytometry <https://www.elabscience.com/List-detail-5568.html>
3. Flow Cytometry Troubleshooting Tips <https://www.elabscience.com/List-detail-5593.html>
4. How to select the appropriate detection channel through the spectrogram? <https://www.elabscience.com/List-detail-459742.html>

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