

Anti-Human CD3-FITC/CD8a-PE/CD45-PerCP/CD4-APC Cocktail

Catalog Number: E-AB-FC0022

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

Description

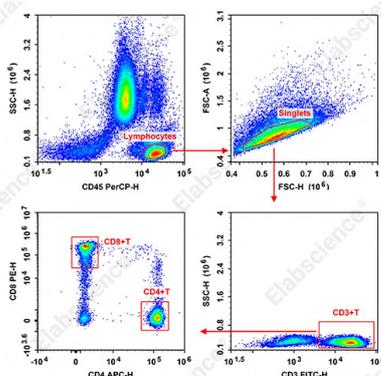
Reactivity	Human
Clone No.	OKT-3;SK1;HI30;SK3
Conjugation	FITC;PE;PerCP;APC
Conjugation Information	FITC is designed to be excited by the Blue laser (488 nm) and detected using an optical filter centered near 530 nm (e.g., a 525/40 nm bandpass filter). PE is designed to be excited by the Blue (488 nm), 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). PerCP is designed to be excited by the blue laser (488 nm) and detected using an optical filter centered near 675 nm (e.g., a 690/50 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).
Storage Buffer	Phosphate buffered solution, pH 7.2, containing 0.09% stabilizer.

Applications

Recommended usage

FCM	Each lot of this antibody is quality control tested by flow cytometric analysis. The amount of the reagent is suggested to be used 5 μL of antibody per test (million cells in 100 μL staining volume or per 100 μL of whole blood). Please check your vial before the experiment. Since applications vary, the appropriate dilutions must be determined for individual use.
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Data



Human peripheral blood lymphocytes are stained with Anti-Human CD3-FITC/CD8a-PE/CD45-PerCP/CD4-APC Cocktail.

Preparation & Storage

Storage	Keep as concentrated solution. This product can be stored at 2-8°C for 24 months. Please protected from prolonged exposure to light and do not freeze.
Shipping	Ice bag

Antigen Information

For Research Use Only

Background

This product is a FCM antibody cocktail made up of FITC Anti-Human CD3 Antibody [Clone: OKT-3] (Mouse IgG2a, κ), PE Anti-Human CD8a Antibody [Clone: SK1] (Mouse IgG1, κ), PerCP Anti-Human CD45 Antibody [Clone: HI30] (Mouse IgG1, κ) and APC Anti-Human CD4 Antibody [Clone: SK3] (Mouse IgG1, κ).

CD3 is a heterotetrameric protein consisting of a CD3 γ , a CD3 δ and 2 CD3 ϵ . It forms complex with TCR. OKT-3 recognize human CD3 ϵ . Human CD3 is expressed on the surface of T cells and NKT cells. CD8 is mainly expressed on cytotoxic T cells and also some subpopulations of NK cells. CD8 forms dimer function. In most cells, CD8 is a heterodimer consisting of CD8a and CD8b, but in NK cells nearly all CD8 is homodimer of CD8a. CD8a can form co-receptor with MHC-I restricted TCR to promote T cell antigen recognition and activation.

CD45 is a single-chain type I transmembrane glycoprotein. Except for erythrocytes and platelets, CD45 is expressed on nearly all of the hematopoietic cells with high level. It is a common marker for blood leukocytes. CD45 is a receptor type protein tyrosine phosphatase and plays essential roles in B cell and T cells signaling.

CD4 is also called Leu-3 or T4. It's a single-chain type I transmembrane glycoprotein, mainly expressed on the surface of T cells, and monocytes/macrophages. In T cells, CD4 forms complex with TCR/CD3 and play important roles in T cell immunity. The target of HIV is CD4+ T cells. Reduction of CD4+ T cells is the main reason of defected immunity after HIV infection.