Human CD4 Antibody (M5A8), mAb, Mouse

Cat. No.	Name	Size
V02701	Human CD4 Antibody (M5A8), mAb, Mouse	*
V02702-25T	Human CD4 Antibody (M5A8) [PE], mAb, Mouse	25 Tests
V02702-100T	Human CD4 Antibody (M5A8) [PE], mAb, Mouse	100 Tests
V02703-25T	Human CD4 Antibody (M5A8) [APC], mAb, Mouse	25 Tests
V02703-100T	Human CD4 Antibody (M5A8) [APC], mAb, Mouse	100 Tests
V02704-25T	Human CD4 Antibody (M5A8) [Biotin], mAb, Mouse	25 Tests
V02704-100T	Human CD4 Antibody (M5A8) [Biotin], mAb, Mouse	100 Tests
V02705-25T	Human CD4 Antibody (M5A8) [FITC], mAb, Mouse	25 Tests
V02705-100T	Human CD4 Antibody (M5A8) [FITC], mAb, Mouse	100 Tests

* Available in multiple package sizes: 100 μg, 1 mg (or more). GenScript can customize each product per customer's request including product size, buffer components,etc.

Specificity	Human CD4
Alternative Name	T4, Leu-3, CD4 antigen (P55)
Isotype	Mouse IgG1, κ
Clone	M5A8
Application	Flow cytometry
Recommended Usage	5 μL per test for each conjugated antibody and 1 μg/mL for unconjugated antibody in flow cytometry assay. Each lot of the conjugated antibodies undergoes quality control test by flow cytometric analysis. The suggested use of this reagent is 5 μL per million cells or 5 μL per 100 μL of whole blood. It is recommended that the reagent be titrated for optimal performance for each application.
Preparation	The antibody was purified by affinity chromatography and then individually conjugated with PE, APC, Biotin and FITC under optimal conditions.

Concentration	Lot-specific. Please check your CoA to find the concentration.

Formulation

For conjugated antibody: PBS, pH 7.4, containing gelatin and 0.03% ProClin300.

For unconjugated antibodies: PBS, pH 7.4, containing 0.03% Proclin 300.

Storage

The conjugated antibodies (V02702, V02703, V02704 and V02705) should be stored at 4°C for one year and protected from prolonged exposure to light. **Do not freeze.**

The unconjugated antibody (V02701) should be stored for up to three months at 2-8°C or for up to three years at -20°C or below. Avoid repeated freezing and thawing cycles.

Background

CD4 (cluster of differentiation 4) is a single glycoprotein with a molecular weight of 59 kDa. CD4 antigen is expressed on the surface of T helper cells, monocytes, macrophages and dendritic cells. It is a receptor for the Human Immunodeficiency Virus type I (HIV-1) envelope protein gp120. CD4$^+$ T helper cells are an essential part of the human immune system. CD4$^+$ T helper cells bind and activate B cells to create immunoglobulins.

Fluorescent Dyes

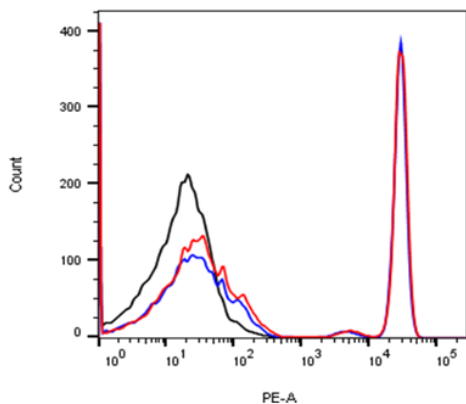|	Excitation Source	Excitation Max	Emission Max
FITC	Blue 488 nm	494 nm	520 nm
PE	Blue 488 nm, Green 532 nm, Yellow/Green 561 nm	496 nm	578 nm
APC	Red 633 nm	650 nm	660 nm

Data Demonstration

Figure 1. Human peripheral blood lymphocytes were stained with CD4 Antibody (M5A8), mAb, Mouse (GenScript, V02701; red curve) or with a negative control antibody (black curve), or with a positive antibody (blue curve) followed by R-PE conjugated anti-mouse IgG.
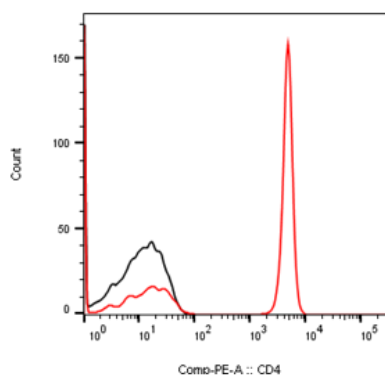

Figure 2. Human peripheral blood lymphocytes were stained with CD4 Antibody (M5A8) [PE], mAb, Mouse (GenScript, V02702; red curve) or with a negative control antibody (black curve) in flow cytometric analysis.
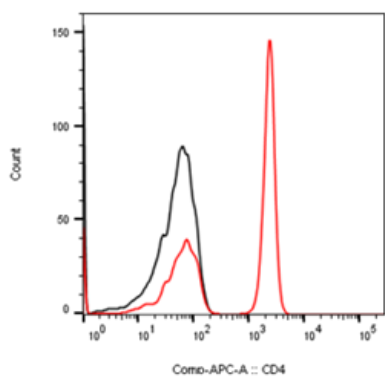

Figure 3. Human peripheral blood lymphocytes were stained with CD4 Antibody (M5A8) [APC], mAb, Mouse (GenScript, V02703; red curve) or with a negative control antibody (black curve) in flow cytometric analysis.
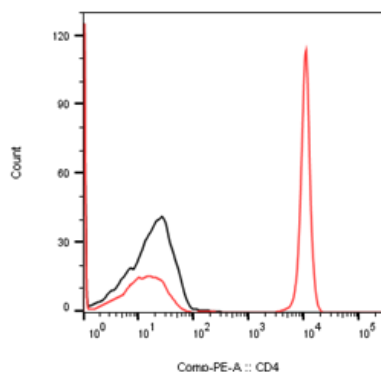

Figure 4. Human peripheral blood lymphocytes were stained with CD4 Antibody (M5A8) [Biotin], mAb, Mouse (GenScript, V02704; red curve) or with a negative control antibody (black curve) followed by PE conjugated Streptavidin in flow cytometric analysis.
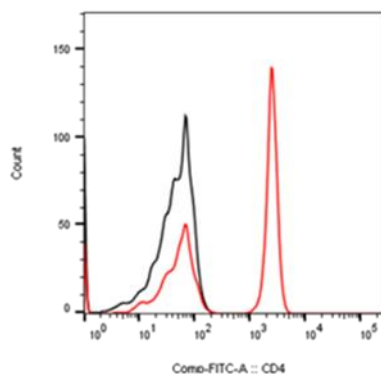
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Figure 5. Human peripheral blood lymphocytes were stained with CD4 Antibody (M5A8) [FITC], mAb, Mouse (GenScript, V02705; red curve) or with a negative control antibody (black curve) in flow cytometric analysis.