

### 30-2593: Anti-CD3 epsilon (activation epitope) FITC (Clone : APA1/1)

<b>Clonality :</b>	Monoclonal
<b>Clone Name :</b>	APA1/1
<b>Application :</b>	FACS
<b>Reactivity :</b>	Mouse, Human
<b>Conjugate :</b>	FITC
<b>Gene :</b>	CD3E
<b>Gene ID :</b>	916
<b>Alternative Name :</b>	CD3 epsilon chain, T3E, IMD18, CD3 antigen, epsilon polypeptide
<b>Isotype :</b>	Mouse IgG1
<b>Immunogen Information :</b>	Purified human CD3 proteins isolated from thymus

#### Description

CD3 complex is crucial in transducing antigen-recognition signals into the cytoplasm of T cells and in regulating the cell surface expression of the TCR complex. T cell activation through the antigen receptor (TCR) involves the cytoplasmic tails of the CD3 subunits CD3 gamma, CD3 delta, CD3 epsilon and CD3 zeta. These CD3 subunits are structurally related members of the immunoglobulins super family encoded by closely linked genes on human chromosome 11. The CD3 components have long cytoplasmic tails that associate with cytoplasmic signal transduction molecules. This association is mediated at least in part by a double tyrosine-based motif present in a single copy in the CD3 subunits. CD3 may play a role in TCR-induced growth arrest, cell survival and proliferation.

**Specificity :** The mouse monoclonal antibody APA1/1 recognizes an activation-dependent intracellular epitope of CD3 epsilon. Exposure of the epitope precedes CD3 phosphorylation and recruitment and activation of ZAP70, which initiates the signaling cascade produced by T-cell activation. APA1/1 provides the earliest known marker for TCR-mediated T cell activation.

#### Product Info

<b>Amount :</b>	0.1 mg
<b>Purification :</b>	The purified antibody is conjugated with fluorescein isothiocyanate (FITC) under optimum conditions. The conjugate is purified by size-exclusion chromatography.
	0.1 mg/ml
<b>Content :</b>	Formulation : Stabilizing phosphate buffered saline (PBS) solution containing 15 mM sodium azide
<b>Storage condition :</b>	Store in the dark at 2-8°C. Do not freeze. Avoid prolonged exposure to light.

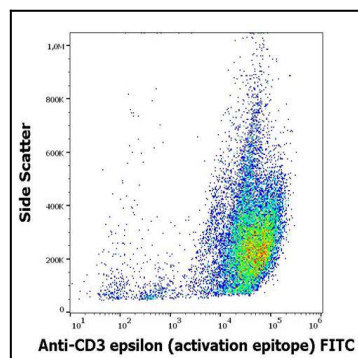


Figure 1 : Flow cytometry intracellular staining pattern of Jurkat cell suspension using anti-human CD3 activation epitope (APA1/1) FITC antibody (concentration in sample 5 µg/ml).

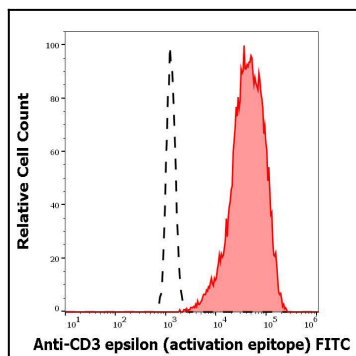


Figure 2 : Separation of Jurkat cells (red-filled) from human neutrophil granulocytes (black-dashed) in flow cytometry analysis (intracellular staining) stained using anti-human CD3 activation epitope (APA1/1) FITC antibody (concentration in sample 5  $\mu\text{g/ml}$ ).