

## Product datasheet for **AM12005PE-N**

### CD3E (activation epitope) Mouse Monoclonal Antibody [Clone ID: APA1/1]

#### Product data:

Product Type:	Primary Antibodies
Clone Name:	APA1/1
Applications:	FC
Recommended Dilution:	<b>Flow Cytometry:</b> 5 µg/ml (starting point).
Reactivity:	Human, Mouse
Host:	Mouse
Isotype:	IgG1
Clonality:	Monoclonal
Immunogen:	Purified human CD3 proteins isolated from thymus
Specificity:	The antibody 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.
Formulation:	PBS containing 15 mM Sodium Azide and 0.2% (w/v) high-grade protease free BSA as a stabilizing agent Label: PE State: Liquid purified Ig fraction Label: Conjugated with R-Phycoerythrin under optimum conditions. The conjugate is purified by size-exclusion chromatography
Concentration:	lot specific
Conjugation:	PE
Storage:	Store undiluted at 2-8°C. <b>DO NOT FREEZE!</b>
Stability:	Shelf life: one year from despatch.
Gene Name:	CD3e molecule
Database Link:	<a href="#">Entrez Gene 12501 Mouse</a> <a href="#">Entrez Gene 916 Human</a> <a href="#">P07766</a>



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**Background:**

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.

**Synonyms:**

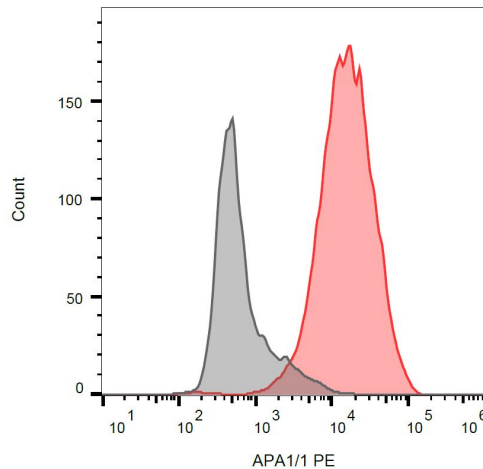
T3/Leu-4

**Protein Families:**

Druggable Genome, Transmembrane

**Protein Pathways:**

Hematopoietic cell lineage, Primary immunodeficiency, T cell receptor signaling pathway

**Product images:**

Intracellular staining of JURKAT cells with anti-CD3 epsilon activation epitope (APA1/1) PE.