

Product datasheet for **SM1754P**

CD3E (Cytopl. Dom.) Rat Monoclonal Antibody [Clone ID: CD3-12]

Product data:

Product Type:	Primary Antibodies
Clone Name:	CD3-12
Applications:	FC, IF, IHC, WB
Recommended Dilution:	Western Blot. Flow Cytometry: 1/50-1/100 (Membrane permeabilisation is required). Immunohistochemistry on Frozen Sections: 1/1000. Immunohistochemistry on Paraffin Embedded Tissues: 1/1000. Heat antigen retrieval treatment for 20 minutes prior to staining of paraffin sections is required (Tris/EDTA buffer pH 9.0 is recommended for this purpose). Recommended Positive Control Tissue: Tonsil.
Reactivity:	Canine, Chicken, Equine, Human, Mouse, Porcine
Host:	Rat
Isotype:	IgG1
Clonality:	Monoclonal
Immunogen:	Synthetic peptide sequence derived from Cytoplasmic epitope of CD3
Specificity:	This antibody recognises a highly conserved epitope of the CD3 molecule expressed by T lymphocytes. As Rat anti Human CD3, clone CD3-12 has been specifically raised against an epitope within the epsilon peptide chain, highly conserved among species clone CD3-12 has a very broad species cross reactivity for the CD3 marker. (<i>Jones et al.</i> 1993; <i>Kothlow et al.</i> 2005).
Formulation:	PBS State: Purified State: Liquid purified IgG fraction from Tissue Culture Supernatant Preservative: 0.09% Sodium Azide
Concentration:	lot specific
Purification:	Affinity Chromatography on Protein G
Conjugation:	Unconjugated
Storage:	Store undiluted at 2-8°C for one month or (in aliquots) at -20°C for longer. Avoid repeated freezing and thawing.



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Stability: Shelf life: one year from despatch.

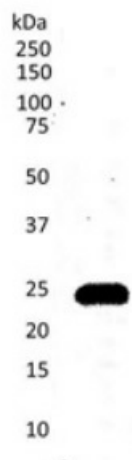
Gene Name: CD3e molecule

Database Link: [Entrez Gene 916 Human P07766](#)

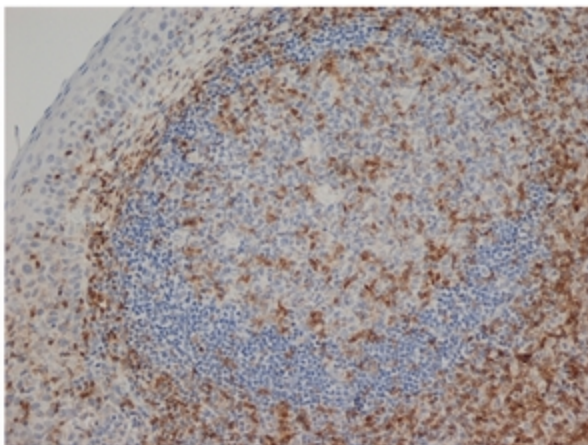
Background: T cell activation through the antigen receptor (TCR) involves the cytoplasmic tails of the CD3 subunits: CD3 gamma, CD3 delta, CD3 epsilon and CD3 zeta. These CD3 subunits are structurally related members of the immunoglobulins super family encoded by closely linked genes on human chromosome 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. The CD3 antigen is present on 68-82% of normal peripheral blood lymphocytes, 65-85% of thymocytes and Purkinje cells in the cerebellum. It is never expressed on B or NK cells. Decreased percentages of T lymphocytes may be observed in some autoimmune diseases.

Synonyms: T3/Leu-4

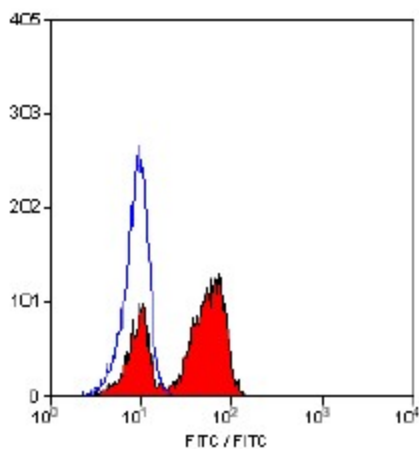
Product images:



Western blot analysis of Jurkat human acute T-cell leukemia whole cell lysate probed with anti Human CD3 antibody. followed by HRP conjugated Goat anti Mouse IgG, visualized by chemiluminescence



Immunohistochemistry in Formalin-fixed, Paraffin embedded human tonsil stained with CD3 antibody following heat mediated antigen retrieval in EDTA buffer pH 9.0



Staining of Human peripheral blood lymphocytes (permeabilised) with Rat anti Human CD3 antibody.