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Anti-Human CD3 Antibody, Clone SK7, FITC

Mouse monoclonal IgG1 antibody against human, chimpanzee CD3, FITC-conjugated

Catalog #60127FI.1	25 Tests	5 µL/test
Catalog #60127FI	100 Tests	5 µL/test

Product Description

This monoclonal antibody reacts with the ~20 kDa cluster of differentiation 3 epsilon (CD3ε) subunit of human T cell receptor (TCR)/CD3 complex, which is expressed on the surface of ~95% of mature T cells and natural killer T cells, and variably on thymocytes. A majority of T cell neoplasms also express CD3. The CD3 complex consists of subunits γ, δ, ε, η, and ζ and binds noncovalently with the TCR. It is involved in transducing antigen recognition signals into the cytoplasm of T cells and in regulating expression of the TCR on cell surfaces. Activation of T cells by the TCR involves the cytoplasmic tails of the CD3 subunits, which are structurally related to type 1 transmembrane proteins and members of the immunoglobulin superfamily. Mutations in the CD3 subunits have been associated with various immunodeficiency disorders including severe combined immunodeficiency (SCID).

Target Antigen:	CD3
Alternative Names:	CD3e, CD3epsilon, T3
Gene ID:	916
Species Reactivity:	Human, Chimpanzee
Host Species:	Mouse
Clonality:	Monoclonal
Clone:	SK7
Isotype:	IgG1, kappa
Immunogen:	Human thymocytes
Conjugate:	FITC (Fluorescein isothiocyanate)

Applications

Verified Applications: FC

Reported Applications: FC

Abbreviations: CellSep: Cell separation; ChIP: Chromatin immunoprecipitation; FA: Functional assay; FACS: Fluorescence-activated cell sorting; FC: Flow cytometry; FCXM: Flow cytometric crossmatch assay; FISH: Fluorescence in situ hybridization; ICC: Immunocytochemistry; IF: Immunofluorescence microscopy; IHC: Immunohistochemistry; IHC-F: Immunohistochemistry (frozen-tissue); IHC-P: Immunohistochemistry (paraffin-embedded); IP: Immunoprecipitation; NMR: Nuclear magnetic resonance spectroscopy; RIA: Radioimmunoassay; WB: Western blotting

Properties

Product Formulation: Phosphate-buffered solution, pH 7.2, containing 0.09% sodium azide and 0.2% (w/v) bovine serum albumin

Purification: The antibody was purified by affinity chromatography and conjugated with FITC under optimal conditions. The solution is free of unconjugated FITC.

Stability and Storage: Product stable at 2 - 8°C when stored undiluted. Do not freeze. Protect product from prolonged exposure to light. For product expiry date, please contact techsupport@stemcell.com.

Directions for Use: For flow cytometry, the suggested use of this antibody is 5 µL per 1 x 10^6 cells in 100 µL or per 100 µL of whole blood. It is recommended that the antibody be titrated for optimal performance for each application.

Data

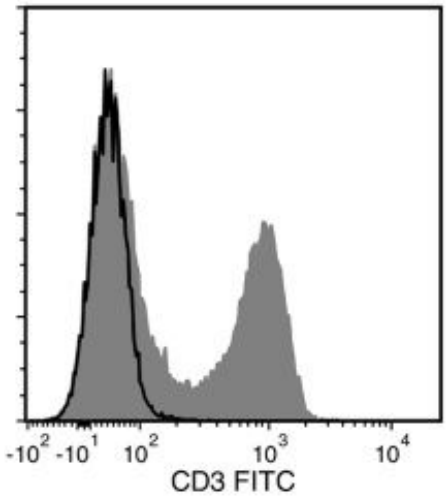

Figure 1. Data for Anti-Human CD3 Antibody, Clone SK7, FITC.

Flow cytometry analysis of human peripheral blood mononuclear cells (PBMCs) labeled with Anti-Human CD3 Antibody, Clone SK7, FITC (filled histogram) or Mouse IgG1, kappa Isotype Control Antibody, Clone MOPC-21, FITC (Catalog #60070FI; solid line histogram).

Related Products

For a complete list of antibodies, including other conjugates, sizes, and clones, as well as related products available from STEMCELL Technologies, visit www.stemcell.com/antibodies, or contact us at techsupport@stemcell.com.

References

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