

Anti-Human CD3 Antibody, Clone SK7, PerCP

Mouse monoclonal antibody against human, chimpanzee CD3, PerCP-conjugated

Catalog #100-1590

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, Leu4, T3
Gene ID:	916
Species Reactivity:	Human, Chimpanzee
Host Species:	Mouse
Clonality:	Monoclonal
Clone:	SK7
Isotype:	IgG1, kappa
Immunogen:	Human thymocytes
Conjugate:	PerCP (Peridinin chlorophyll protein complex)

Applications

Verified Applications:	FC
Reported Applications:	FC, FCXM
Special Applications:	This antibody clone has been verified for purity assessments of cells isolated with EasySep™ Human Naïve Pan T Cell Isolation Kit (Catalog #17961).

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 saline, pH 7.2, containing 0.09% sodium azide and 0.1% gelatin
Purification:	The antibody was purified by affinity chromatography and conjugated with PerCP under optimal conditions. The solution is free of unconjugated PerCP.
Stability and Storage:	Product stable at 2 - 8°C when stored undiluted. Do not freeze. Protect product from prolonged exposure to light. Stable until expiry date (EXP) on label.
Directions for Use:	For flow cytometry, the suggested use of this antibody is $\leq 1 \mu\text{g}$ per 1×10^6 cells in 100 μL . It is recommended that the antibody be titrated for optimal performance for each application.

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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