Antibodies

Anti-Human CD4 Antibody, Clone SK3, PE

Mouse monoclonal IgG1 antibody against human, rhesus, cynomolgus CD4, PE-conjugated

Catalog #60122PE	100 Tests	5 µL/test
#60122PE.1	25 Tests	5 µL/test

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Product Description

The SK3 antibody reacts with CD4, an ~59 kDa single-chain type 1 transmembrane glycoprotein and member of the immunoglobulin (Ig) superfamily; CD4 contains four extracellular Ig-like domains (D1 - D4). The epitope for SK3 has been localized to the D3 domain of the protein, which has a structure resembling an Ig variable domain. CD4 is expressed at relatively high levels by most thymocytes and a subpopulation of T cells (T-helper cells), and at lower levels by peripheral blood monocytes and macrophages. CD4 binds to a nonpolymorphic region of MHC II and acts as a co-receptor to the T cell receptor (TCR) in MHC II-restricted antigen recognition by enhancing the affinity of the association between the TCR and MHC II-antigen complex. CD4 also functions to amplify signals from the TCR to the cytoplasm through the interaction of its intracellular domain with cytoplasmic tyrosine kinases such as Lck. Moreover, CD4 is a receptor for the human immunodeficiency virus (HIV). Binding of the SK3 antibody blocks HIV binding and mixed lymphocyte reaction (MLR).

Target Antigen Name:	CD4
Alternative Names:	Leu3, T4
Gene ID:	920
Species Reactivity:	Human, Rhesus, Cynomolgus, African Green Monkey, Olive Baboon, Pigtailed Macaque, Sooty Mangabey, Squirrel Monkey
Host Species:	Mouse (BALB/c)
Clonality:	Monoclonal
Clone:	SK3
Isotype:	IgG1, kappa
Immunogen:	Human peripheral blood T lymphocytes
Conjugate:	PE (Phycoerythrin)

Applications

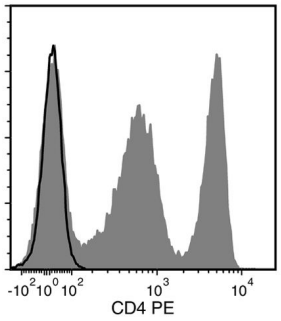
Verified:	FC
Reported:	FC

Abbreviations: CellSep: Cell separation; ChIP: Chromatin immunoprecipitation; FA: Functional assay; FACS: Fluorescence-activated cell sorting; FC: Flow cytometry; ICC: Immunocytochemistry; IF: Immunofluorescence microscopy; IHC: Immunohistochemistry; IP: Immunoprecipitation; RIA: Radioimmunoassay; WB: Western blotting

Properties

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 PE under optimal conditions. The solution is free of unconjugated PE and unconjugated antibody.
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



Flow cytometry analysis of human peripheral blood mononuclear cells (PBMCs) labeled with Anti-Human CD4 Antibody, Clone SK3, PE (filled histogram) or Mouse IgG1, kappa Isotype Control Antibody, Clone MOPC-21, PE (Catalog #60070PE) (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, please visit our website at www.stemcell.com/antibodies or contact us at techsupport@stemcell.com.

References

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