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Anti-Mouse CD4 Antibody, Clone GK1.5, FITC

Rat monoclonal antibody against mouse, hamster CD4, FITC-conjugated

Catalog #100-1603 | 100 µg | 0.5 mg/mL

Product Description

This monoclonal antibody (clone GK1.5) reacts with mouse cluster of differentiation 4 (CD4), a 55 kDa single chain type 1 transmembrane glycoprotein, belonging to the immunoglobulin (Ig) superfamily. CD4 contains four extracellular Ig-like domains; D1 - D4. CD4 is expressed at relatively high levels by most thymocytes and a subpopulation of T cells; T helper/inducer cells and at lower levels on dendritic cells. Unlike humans, CD4 is not expressed by murine monocytes or macrophages. CD4 increases the affinity in the interaction between T cell receptor (TCR) and major histocompatibility complex II (MHC II) antigen complex by binding to a non-polymorphic region of MHC II and acting as a co-receptor to TCR in MHC II-restricted antigen recognition. CD4 also amplifies signals from TCR to the cytoplasm through the interaction of its intracellular domain with the cytoplasmic tyrosine kinases such as lymphocyte-specific protein tyrosine kinase (Lck). This monoclonal antibody is widely used as a phenotypic marker for CD4 expression. The RM4-5 clone can block binding of the GK1.5 antibody clone to CD4 on the cell surface. The GK1.5 antibody clone is also reported to be cross-reactive with Syrian hamster CD4.

Target Antigen:	CD4
Alternative Names:	L3T4, T4
Gene ID:	12504
Species Reactivity:	Mouse, Hamster
Host Species:	Rat
Clonality:	Monoclonal
Clone:	GK1.5
Isotype:	IgG2b, kappa
Immunogen:	Mouse CTL, clone V4
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 saline, pH 7.2, containing 0.09% sodium azide and 0.1% gelatin
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. Stable until expiry date (EXP) on label.
Directions for Use:	For flow cytometry, the suggested use of this antibody is ≤ 1 µg per 1 x 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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