Antibodies

Anti-Mouse CD4 Antibody, Clone RM4-4, Biotin

Rat monoclonal IgG2b antibody against mouse CD4, biotin-conjugated

Catalog #60029BT	500 µg	0.5 mg/mL
#60029BT.1	100 µg	0.5 mg/mL

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TOLL FREE PHONE 1 800 667 0322 • PHONE +1 604 877 0713
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Product Description

The RM4-4 antibody reacts with mouse CD4, an ~55 kDa single-chain type 1 transmembrane glycoprotein and member of the immunoglobin (Ig) superfamily; CD4 contains four extracellular Ig-like domains. 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. In the mouse, CD4 is not expressed by monocytes/macrophages. CD4 binds to a non-polymorphic 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 avidity 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. Binding of the RM4-4 antibody does not block binding of antibody clones RM4-5 or GK1.5.

Target Antigen Name:	CD4
Alternative Names:	L3T4, T4
Gene ID:	12504
Species Reactivity:	Mouse
Host Species:	Rat (SD)
Clonality:	Monoclonal
Clone:	RM4-4
Isotype:	IgG2b, kappa
Immunogen:	BALB/c mouse thymocytes
Conjugate:	Biotin

Applications

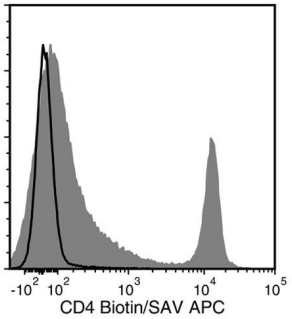
Verified:	FC
Reported:	FC
Special Applications:	This antibody clone has been verified for purity assessments of cells isolated with EasySep™ kits, including EasySep™ Mouse CD4+ T Cell Isolation Kit (Catalog #19852) and EasySep™ Mouse CD4 Positive Selection Kit II (Catalog #18952).

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 0.1% gelatin
Purification:	The antibody was purified by affinity chromatography and conjugated with biotin under optimal conditions.
Stability and Storage:	Product stable at 2 - 8°C when stored undiluted. Do not freeze. For product expiry date, please contact techsupport@stemcell.com.
Directions for Use:	For flow cytometry, the suggested use of this antibody is ≤ 0.015 µg per 1 x 10^6 cells in 100 µL. It is recommended that the antibody be titrated for optimal performance for each application.

Data



Flow cytometry analysis of C57BL/6 mouse splenocytes labeled with Anti-Mouse CD4 Antibody, Clone RM4-4, Biotin, followed by streptavidin (SAV) APC (filled histogram), or Rat IgG2b, kappa Isotype Control Antibody, Clone RTK4530, Biotin (Catalog #60077BT), followed by SAV APC (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 www.stemcell.com/antibodies or contact us at techsupport@stemcell.com.

References

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