

Anti-Mouse CD4 Antibody, Clone RM4-5, Biotin



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Antibodies

Rat monoclonal IgG2a antibody
against mouse CD4, biotin-conjugated

Catalog #60017BT	500 µg	0.5 mg/mL
#60017BT.1	50 µg	0.5 mg/mL

Product Description

The RM4-5 antibody reacts with mouse CD4, an ~55 kDa single-chain type 1 transmembrane glycoprotein and member of the immunoglobulin (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 RM4-5 antibody to CD4 inhibits ligand binding in vitro. Moreover, binding of the RM4-5 antibody can be blocked by the clone GK1.5 antibody.

Target Antigen Name:	CD4
Alternative Names:	L3T4, T4
Gene ID:	12504
Species Reactivity:	Mouse
Host Species:	Rat (DA)
Clonality:	Monoclonal
Clone:	RM4-5
Isotype:	IgG2a, kappa
Immunogen:	BALB/c mouse thymocytes
Conjugate:	Biotin

Applications

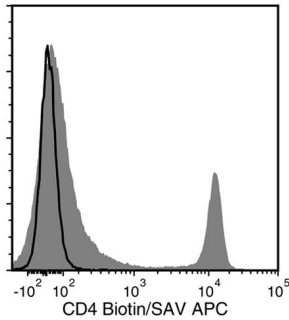
Verified:	CellSep, FC
Reported:	FC, IHC
Special Applications:	This antibody clone has been verified for purity assessments of cells isolated with EasySep™ kits, including EasySep™ Mouse CD4+ T Cell Isolation Kit (Catalog #19852) and EasySep™ Mouse CD25 Regulatory T Cell Positive Selection Kit (Catalog #18782).

Abbreviations: CellSep: Cell separation; ChIP: Chromatin immunoprecipitation; FA: Functional assay; 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
Purification:	The antibody was purified by affinity chromatography and conjugated with biotin under optimal conditions. The solution is free of unconjugated biotin.
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 $\leq 0.25 \mu\text{g}$ per 1×10^6 cells in 100 µL volume. 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 RM4-5, Biotin followed by streptavidin (SAV) APC (filled histogram) or Rat IgG2a, kappa Isotype Control Antibody, Clone RTK2758, Biotin (Catalog #60076BT) 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 our website at www.stemcell.com/antibodies or contact us at techsupport@stemcell.com.

References

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