

Anti-Mouse CD24 Antibody, Clone M1/69, APC



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Antibodies

Rat monoclonal IgG2b antibody
against mouse CD24, APC-conjugated

Catalog #60099AZ	100 µg	0.2 mg/mL
#60099AZ.1	25 µg	0.2 mg/mL

Product Description

The M1/69 antibody reacts with murine CD24, an ~35 - 45 kDa glycosylphosphatidylinositol (GPI)-anchored glycoprotein expressed on lymphocytes, granulocytes, thymocytes, erythrocytes, epithelial cells, neurons, and dendritic cells. CD24 is differentially expressed during T and B cell development, and is not found on the majority of mature peripheral T cells or plasma cells. It is expressed on pro-B, pre-B, and mature B cells, but expression is strongly down-regulated after B cell activation. It is involved in regulating B cell apoptosis and in preventing terminal differentiation of B cells into antibody-secreting plasmablasts and plasma cells. CD24 acts as an adhesion or co-stimulatory molecule, and is involved in lymphocyte activation, proliferation, and differentiation through homophilic interactions or by binding to ligands such as P-selectin (CD62P). Heterogeneous glycosylation results in a variable molecular mass for the molecule on cells of different lineages, and is also believed to cause the slight differences in the degree of labeling observed for lymphocyte populations when employing alternative CD24-specific antibodies. The M1/69 antibody reportedly induces agglutination and lysis of mouse red blood cells in the presence of complement.

Target Antigen Name:	CD24
Alternative Names:	CD24a, Heat stable antigen, HSA, Ly-52, Nectadrin, Small cell lung carcinoma cluster 4 antigen
Gene ID:	12484
Species Reactivity:	Mouse
Host Species:	Rat (DA)
Clonality:	Monoclonal
Clone:	M1/69
Isotype:	IgG2b, kappa
Immunogen:	C57BL/10 mouse splenic T cells and concanavalin A-activated splenocytes
Conjugate:	APC

Applications

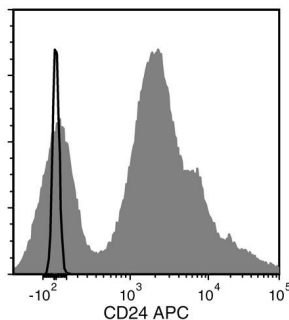
Verified:	FC
Reported:	FC
Special Applications:	This antibody clone has been verified for purity assessments of cells isolated with EasySep™ kits, including EasySep™ Mouse B Cell Isolation Kit (Catalog #19854).

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
Purification:	The antibody was purified by affinity chromatography and conjugated with APC under optimal conditions. The solution is free of unconjugated APC.
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 $\leq 0.06 \mu\text{g}$ per 1×10^6 cells in 100 µL. It is recommended that the antibody be titrated for optimal performance for each application.

Data



Flow cytometry analysis of C57BL/6 mouse splenocytes labeled with Anti-Mouse CD24 Antibody, Clone M1/69, APC (filled histogram) or Rat IgG2b, kappa Isotype Control Antibody, Clone RTK4530, APC (Catalog #60077AZ) (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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7. Chappel MS et al. (1996) Cross-linking the murine heat-stable antigen induces apoptosis in B cell precursors and suppresses the anti-CD40-induced proliferation of mature resting B lymphocytes. *J Exp Med* 184(5): 1639–49. (FA/Inhibition, FC)
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9. Kay R et al. (1990) Expression cloning of a cDNA encoding M1/69-J11d heat-stable antigens. *J Immunol* 145(6): 1952–9. (FC, WB)
10. Wilson A et al. (1988) Subpopulations of mature murine thymocytes: properties of CD4-CD8+ and CD4+CD8- thymocytes lacking the heat-stable antigen. *Cell Immunol* 117(2): 312–26. (FC)

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