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

Antibodies

Rat monoclonal IgG2b antibody against mouse CD24, PE-conjugated

Catalog #60099PE 200 μg 0.2 mg/mL #60099PE.1 50 μg 0.2 mg/mL



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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 costimulatory 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: PE

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; FC: Flow cytometry; ICC: Immunocytochemistry; IF: Immunofluorescence microscopy; IHC: Immunohistochemistry; IP: Immunoprecipitation; 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 PE under optimal conditions. The

solution is free of unconjugated PE.

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 ≤ 0.25 µg per 1 x 10e6 cells in 100 µL volume. It is

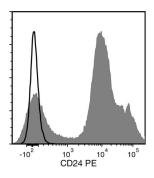
recommended that the antibody be titrated for optimal performance for each application.

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Data



Flow cytometry analysis of C57BL/6 mouse splenocytes labeled with Anti-Mouse CD24 Antibody, Clone M1/69, PE (filled histogram) or a rat IgG2b, kappa isotype control antibody, PE (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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- 3. Kadmon G, et al. Differential, LFA-1-sensitive effects of antibodies to nectadrin, the heat-stable antigen, on B lymphoblast aggregation and signal transduction. Biochem Biophys Res Commun 198(3): 1209-15, 1994 (FA/Stimulation)
- 4. Chappel MS, et al. 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, 1996 (FA/Inhibition, FC)
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- 6. Koni PA, Flavell RA. Lymph node germinal centers form in the absence of follicular dendritic cell networks. J Exp Med 189(5): 855-64, 1999 (FC, IHC)
- 7. Chen CY, et al. Regenerative potentials of the murine thyroid in experimental autoimmune thyroiditis: role of CD24. Endocrinology 150(1): 492-99, 2009 (IHC)
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