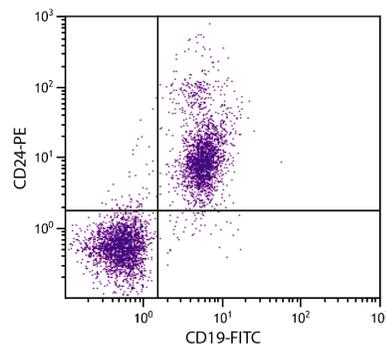




Rat Anti-Mouse CD24

Cat. No.	Format	Size
1815-01	Purified (UNLB)	0.5 mg
1815-02	Fluorescein (FITC)	0.5 mg
1815-02S	Fluorescein (FITC)	0.1 mg
1815-08	Biotin (BIOT)	0.5 mg
1815-09	R-phycoerythrin (PE)	0.1 mg
1815-09L	R-phycoerythrin (PE)	0.2 mg
1815-11	Allophycocyanin (APC)	0.1 mg
1815-13	Spectral Red® (SPRD)	0.1 mg
1815-14	Low Endotoxin, Azide-Free (LE/AF)	0.5 mg



BALB/c mouse splenocytes were stained with Rat Anti-Mouse CD24-PE (SB Cat. No. 1815-09) and Rat Anti-Mouse CD19-FITC (SB Cat. No. 1575-02).

Overview

Clone	30-F1
Isotype	Rat (LOU/Ws1/M) IgG _{2c} K
Immunogen	Mouse thymus or spleen
Specificity	Mouse CD24; Mr 35-45 kDa
Alternate Name(s)	Heat stable antigen, HSA

Description

CD24 is expressed in B cells until their terminal differentiation into plasma cells. It has been used widely as a marker to fractionate different B-lineage differentiation stages. CD24 has been found on a variety of other hematopoietic and neural cell types and is now classified as a costimulatory molecule. The CD24 molecule, also known as HSA, is composed mostly of carbohydrate with a protein core of only 31-35 amino acids in the human and 27 amino acids in the mouse. CD24 is now included in the large group of phosphatidylinositol-anchored membrane proteins. Studies with purified CD24 applied to latex beads have demonstrated a self-binding property suggesting that the molecule is capable of promoting homotypic aggregation, binding, and cell adhesion. This is supported by earlier observations of the blockade of B cell lymphoblast aggregation with an anti-CD24 monoclonal antibody. Recent studies of murine CD24 have assigned a role for CD24 as a ligand for P-selectin, a calcium-dependent lectin.

Applications

FC – Quality tested¹⁻⁴

Working Dilutions

Flow Cytometry	FITC and BIOT conjugates	≤ 2 µg/10 ⁶ cells
	PE, APC, and SPRD conjugates	≤ 0.2 µg/10 ⁶ cells
For flow cytometry, the suggested use of these reagents is in a final volume of 100 µL		

Other Applications Since applications vary, you should determine the optimum working dilution for the product that is appropriate for your specific need.

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Handling and Storage

- The purified (UNLB) antibody is supplied as 0.5 mg of purified immunoglobulin in 1.0 mL of borate buffered saline, pH 8.2. *No preservatives or amine-containing buffer salts added.* Store at 2-8°C.
- The fluorescein (FITC) conjugate is supplied as 0.5 mg or 0.1 mg in 1.0 mL of PBS/NaN₃. Store at 2-8°C.
- The biotin (BIOT) conjugate is supplied as 0.5 mg in 1.0 mL of PBS/NaN₃. Store at 2-8°C.
- The R-phycoerythrin (PE) conjugate is supplied as 0.1 mg in 1.0 mL or 0.2 mg in 2.0 mL of PBS/NaN₃ and a stabilizing agent. Store at 2-8°C. **Do not freeze!**
- The allophycocyanin (APC) conjugate is supplied as 0.1 mg in 1.0 mL of PBS/NaN₃ and a stabilizing agent. Store at 2-8°C. **Do not freeze!**
- The Spectral Red® (SPRD) conjugate is supplied as 0.1 mg in 1.0 mL of PBS/NaN₃ and a stabilizing agent. Store at 2-8°C. **Do not freeze!**
- The low endotoxin, azide-free (LE/AF) antibody is supplied as 0.5 mg purified immunoglobulin in 1.0 mL of PBS. Contains no preservative; handle under aseptic conditions. Store at 2-8°C or aliquot into smaller volumes and store at -20°C. Avoid multiple freeze / thaw cycles.
- Protect fluorochrome-conjugated forms from light. Reagents are stable for the period shown on the label if stored as directed.

Warning

Some reagents contain sodium azide. Please refer to product specific SDS.

References

1. Ledbetter JA, Herzenberg LA. Xenogeneic monoclonal antibodies to mouse lymphoid differentiation antigens. *Immunol Rev.* 1979;47:63-90. (Immunogen, FC)
2. Palmer VL, Kassmeier MD, Willcockson J, Akhter MP, Cullen DM, Swanson PC. N-acetylcysteine increases the frequency of bone marrow pro-B/pre-B cells, but does not reverse cigarette smoking-induced loss of this subset. *PLoS One.* 2011;6:e24804. (FC)
3. Hassaballa AE, Palmer VL, Anderson DK, Kassmeier MD, Nganga VK, Parks KW, et al. Accumulation of B1-like B cells in transgenic mice over-expressing catalytically inactive RAG1 in the periphery. *Immunology.* 2011;134:469-86. (FC)
4. Kassmeier MD, Mondal K, Palmer VL, Ravel P, Kumar S, Perry GA, et al. VprBP binds full-length RAG1 and is required for B-cell development and V(D)J recombination fidelity. *EMBO J.* 2012;31:945-58. (FC)

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Spectral Red® is a PE/CY5 tandem conjugate.

Cy™ is a trademark of Cytiva or one of its subsidiaries.