



CELL LAB Rat Anti-Mouse CD24/HSA

<u>Cat. No.</u>	<u>Form</u>	<u>Quantity</u>
732083	Purified (UNLB) Antibody	0.5 mg
732084	Fluorescein (FITC) Conjugate	0.5 mg
732085	Biotin (BIOT) Conjugate	0.5 mg
732086	Phycoerythrin (PE) Conjugate	0.1 mg
733279	Spectral Red™ (SPRD) Conjugate	0.1 mg

For Laboratory Use Only

DESCRIPTION

Clone: 91
Isotype: Rat IgG2a κ
Specificity: Mouse heat stable antigen (HSA); Mr 95 kDa

CD24, also known as heat stable antigen, is a phosphatidylinositol-linked cell surface glycoprotein that is expressed at all stages of B cell development and on most thymocytes.¹⁻³ The absence of expression from mature T cells is closely associated with their maturation from CD4⁺CD8⁺CD24⁺ thymocytes to either CD4⁺CD8⁻CD24⁻ or CD4⁻CD8⁺CD24⁻ T cells. CD24 is also present on mouse granulocytes, monocytes, Langerhans cells and erythrocytes.⁴⁻⁶ Its ligand is P-selectin (CD62P).⁷ CD24 may play a role in regulation of B cell proliferation and differentiation, and it has been proposed that heat stable antigen promotes homotypic adhesion between B lymphocytes.¹⁻³ Monoclonal antibody 91 can be used to inhibit B-cell differentiation.

APPLICATIONS

- Flow cytometry
- Immunohistochemistry (frozen sections)
- Immunoprecipitation

CHARACTERIZATION

To ensure lot-to-lot consistency, each batch of product is tested to conform with characteristics of a standard reference reagent using flow cytometry.

WORKING DILUTIONS

Flow Cytometry:	FITC conjugate	≤4 μg/10 ⁶ cells
	BIOT conjugate	≤2 μg/10 ⁶ cells
	PE conjugate	≤0.3 μg/10 ⁶ cells
	SPRD conjugate	≤0.3 μg/10 ⁶ cells

Other Applications: Since applications vary, determine the optimum working dilution of the product that is appropriate for your specific needs.

HANDLING AND STORAGE

- The purified (UNLB) antibody is supplied as 0.5 mg of purified immunoglobulin in 1.0 mL of 100 mM borate buffered saline, pH 8.0. No preservatives or amine-containing buffer salts added.
- The fluorescein (FITC) conjugate is supplied as 0.5 mg in 1.0 mL of PBS/NaN₃.
- The biotin (BIOT) conjugate is supplied as 0.5 mg in 1.0 mL of PBS/NaN₃.

- The Spectral Red (SPRD) conjugate is supplied as 0.1 mg in 1.0 mL of PBS/NaN₃ and a stabilizing agent.
- The phycoerythrin (PE) conjugate is supplied as 0.1 mg in 1.0 mL of PBS/NaN₃ and a stabilizing agent.
- Protect fluorochrome-conjugated forms from light. Do not freeze.
- Reagent is stable until the expiration date on the vial when stored at 2-8°C.

STATEMENT OF WARNINGS

1. Specimens, samples and all material coming in contact with them should be handled as if capable of transmitting infection and disposed of with proper precautions.
2. Never pipet by mouth and avoid contact of samples with skin and mucous membranes.
3. Do not use reagent beyond the expiration date on the vial label.
4. Minimize exposure of reagent to light during storage or incubation.
5. Avoid microbial contamination of reagent or erroneous results may occur.
6. Use Good Laboratory Practice (GLP) when handling this reagent.
7. Harmful if swallowed.
8. After contact with skin, wash immediately with plenty of water.
9. Contains sodium azide. Sodium azide under acidic conditions yields hydrazoic acid, an extremely toxic compound. Azide compounds should be flushed with running water while being discarded. These precautions are recommended to avoid deposits in metal piping in which explosive conditions can develop. If skin or eye contact occurs, immediately wash excessively with water.

TRADEMARKS

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REFERENCES

1. Bruce J, Symington FW, McKearn TJ and Sprent J. 1981. A monoclonal antibody discriminating between subsets of T and B cells. *J Immunol*, 127:2496-2501.
2. Alterman LA, Crispe IN and Kinnon C. 1990. Characterization of the murine heat-stable antigen: an hematolymphoid differentiation antigen defined by the J11d, M1/69 and B2A2 antibodies. *Eur J Immunol*, 20:1597-1602.
3. Davidson WF, Chused TM and Morse HC. 1981. Genetic control of B- and T-lymphocyte abnormalities of NZB mice in crosses with B10.D2 mice. *Immunogenetics*, 13:421-434.
4. Rougon G, Alterman LA, Dennis K, Guo XJ and Kinnon C. 1991. The murine heat-stable antigen: a differentiation antigen expressed in both the hematolymphoid and neural cell lineages. *Eur J Immunol*, 21:1397-1402.
5. Scollay R, Bartlett P and Shortman K. 1984. T cell development in the adult murine thymus: changes in the expression of the surface antigens Ly2, L3T4 and B2A2 during development from early precursor cells to emigrants. *Immunol Rev*, 82:79-103.
6. Wilson A, Day LM, Scollay R and Shortman K. 1988. Subpopulations of mature murine thymocytes: properties of CD4-CD8+ and CD4+CD8- thymocytes lacking the heat-stable antigen. *Cell Immunol*, 117:312-26.
7. Aigner S, Ruppert M, Hubbe M, Sammar M, Sthoeger Z, Butcher EC, Vestweber D and Altevogt P. 1995. Heat stable antigen (mouse CD24) supports myeloid cell binding to endothelial and platelet P-selectin. *International Immunology*, 7:1557-1565.



Manufactured for:
Beckman Coulter, Inc.
4300 N. Harbor Blvd.
Fullerton, CA 92835
www.beckmancoulter.com

Printed in USA
Made in USA

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PN 733924-B