

**CYTO-STAT®/  
COULTER CLONE®  
B4 (Lytic)-RD1/J5-FITC**

REF 6604241 - 50 tests

PN 4236079-F



	CLONE 1	CLONE 2
Specificity	CD19	CD10
Clone	HD237 (IgG2b) <sup>2</sup>	HD237 (IgG2b) <sup>3</sup>
Hybridoma	P3-NS1/1-AG4-1 x BALB/c	NS/1-AG4 x BALB/c
Immunogen	Leukemic cells from a patient with hairy cell leukemia	Tumor cells from a patient with a CALLA positive non-T cell ALL
Ig Chain	IgG2b	IgG2a
Species	Mouse	Mouse
Source	Ascites fluid	Ascites fluid
Purification	Affinity chromatography	Affinity chromatography
Fluorescence	Excites at 486-580 nm / Emits at 568-590 nm	Excites at 468-509 nm / Emits at 504-541 nm
Conjugation	RD1 (Phycoerythrin)	FITC (Fluorescein Isothiocyanate)
Molar Ratio	RD1/Protein: 0.5-1.5	FITC/Protein: 3-10

**ANALYTE SPECIFIC REAGENT**

Analytical and performance characteristics are not established.

**ANTIBODY SPECIFICITY**

B4 (Lytic) monoclonal antibody recognizes the pan-B CD19 lymphocyte antigen, which has a molecular weight of 95 kD.<sup>1</sup> It reacts with B cells including early B-cell precursors and pre-B cells. Plasma cells are negative. B4 (Lytic) does not bind to T lymphocytes, myeloid cells, erythrocytes or platelets. It stains B-cell areas in lymphoid organs and dendritic reticulum cells in lymphoid follicles.<sup>1,2</sup>

J5 (CD10), a Common Acute Lymphoblastic Leukemia Antigen (CALLA), has a molecular weight of 100 kD.<sup>3</sup> It is found on some granulocytes and bone marrow, fetal liver, renal tubular, glomerular epithelial and breast myoepithelial cells from some specimens.<sup>4</sup>

**REAGENT CONTENTS**

The concentration of nonantibody reagents in 0.5 mL (1 vial) is 0.2% BSA, 0.01 M potassium phosphate, 0.15 M NaCl, 0.1% NaN<sub>3</sub> and stabilizers.

**STATEMENT OF WARNINGS**

1. This reagent contains 0.1% sodium azide. Sodium azide under acid 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, wash excessively with water.
2. Do not use antibody beyond the expiration date on label.
3. Samples and all material coming in contact with them should be handled as if capable of transmitting infection and disposed of with proper precautions.
4. Never pipet by mouth and avoid contact of samples with skin and mucous membranes.
5. Minimize exposure of reagents to light during storage or incubation.
6. Avoid microbial contamination of reagents or incorrect results might occur.
7. Use Good Laboratory Practices (GLP) when handling this reagent.
8. Harmful if swallowed.
9. After contact with skin, wash immediately with plenty of water.

**STORAGE CONDITIONS AND STABILITY**

This reagent is stable up to the expiration date when stored at 2-8°C. Do not freeze. Minimize exposure to light.

**EVIDENCE OF DETERIORATION**

Any change in the physical appearance of the reagent (clear, colorless to pinkish liquid) or any major variation in values obtained for control samples might indicate deterioration and the reagent should not be used.

**REAGENT PREPARATION**

No preparation is necessary for CYTO-STAT/COULTER CLONE B4 (Lytic)-RD1/J5-FITC. This Cyto-Stat/Coulter Clone reagent is used directly from the vial.

Bring reagent to 20-25°C prior to use.

**USAGE**

This reagent is for use with standard flow cytometry methodologies.

The use of B4 (Lytic)-RD1 and J5-FITC in this reagent is not intended for the enumeration of CD19 or CD10 cells in clinical diagnostic applications.

**SELECTED REFERENCES**

1. Nadler LM, Anderson KC, Marti G, Bates M, Daley JF and Schlossman SF: 1983. B4, a human B lymphocyte-associated antigen expressed on normal, mitogen-activated, and malignant B lymphocytes. *J Immunol* 131:244-250.
2. Kiesel S, Haas R, Molderhauer G, Ludemann A, Hunstein W, Korblyng M, Nadler L, Messner H and Dorken B: 1987. Elimination of clonogenic malignant B cells in autologous bone marrow transplantation with the monoclonal antibodies HD237 (CD19) and B1 (CD20) with complement. In: *Proceedings of the First IUIS Conference on Clinical Immunology*, Elsevier Science Publishers, Amsterdam.
3. Ritz J, Pesando JM, Notis-McConarty J, Lazarus H and Schlossman SF: 1980. A monoclonal antibody to human acute lymphoblastic leukaemia antigen. *Nature* 283:583-585.
4. Cossman H, Neckers LM, Leonard WJ and Greene WC: 1983. Polymorphonuclear neutrophils express the common acute lymphoblastic leukemia antigen. *J Exp Med* 157:1064-1069.

**PRODUCT AVAILABILITY**


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RD1 is licensed under patent 4,520,110.

For additional information or if damaged product is received in the USA, call 800-526-7694. Outside the USA, contact your local Beckman Coulter Representative.

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 Beckman Coulter, Inc.  
4300 N. Harbor Blvd.  
Fullerton, CA 92835  
[www.beckmancoulter.com](http://www.beckmancoulter.com)

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