

[REF] A83478 - 100 tests

PN A83484-AA



	B4
Specificity	CD19
Clone	89B
Hybridoma	NS/1-AG4-1 x BALB/c
Immunogen	Tumor cells from a patient with B cell CLL. ⁴
Ig Chain	IgG1
Species	Mouse
Source	Mouse ascites fluid or conditioned media
Purification	Affinity chromatography
Fluorescence	Non Applicable
Conjugation	Non Applicable
Molar Ratio	Non Applicable
Scatter Detection	Forward and/or side

ANALYTE SPECIFIC REAGENT

Analytical and performance characteristics are not established.

ANTIBODY SPECIFICITY

The CD19 antigen is a glycoprotein with a molecular weight of 95 kd.^{1,2} It is an early, lineage-specific pan B cell surface antigen and normally is present continuously from the earliest stages of B cell progenitor development until lost at the terminal stage of B lymphocyte differentiation into plasma cells.^{1,4} It is found on over 90% of B lymphocytes isolated from either peripheral blood, spleen, lymph node or tonsil and on approximately 5% of bone marrow cells.² Expression within the hematopoietic system is restricted to normal and neoplastic B cells.² The CD19 antigen is not detected on peripheral blood T lymphocytes, monocytes, granulocytes or platelets.^{2,4}

REAGENT

See table above.

REAGENT CONTENTS

The antibody concentration is 5.0 µg/test.

The final concentration of nonantibody reagents when reconstituted is 0.2% BSA, 0.01 M potassium phosphate, 0.15 M NaCl and 0.1% NaN₃.

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. 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.
3. Never pipet by mouth and avoid contact of samples with skin and mucous membranes.
4. Do not use reagent beyond the expiration date on the vial label.
5. Minimize exposure of reagent to light during storage or incubation.
6. Avoid microbial contamination of reagents or erroneous results may 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

Unreconstituted, lyophilized reagent is stable to the expiration date on the vial label when stored at 2-8°C. Do not freeze. Minimize exposure to light.

Reconstituted stock solution lyophilized reagent is stable as follows:

- 6 months when stored at 2-8°C when reconstituted using the Reconstitution Procedure described in the REAGENT PREPARATION section. If all of a reconstituted reagent is not to be used within 6 months, follow the Freezing Procedure.
- 1 year when stored at -70°C using the Freezing Procedure.

FREEZING PROCEDURE

MATERIALS REQUIRED BUT NOT SUPPLIED

PBS - Phosphate Buffered Saline (pH=7.2) PN 6603369
 PBS containing 2% heat-inactivated fetal or newborn calf serum (FCS). Dilute 2 mL of calf serum to 100 mL with PBS.

1. Dilute the reconstituted stock solution of the COULTER CLONE reagent with PBS containing 2% FCS prior to freezing as follows:

Add 5 µL of reconstituted stock solution (1 test*) to 100 µL PBS with 2% FCS**.

*These may be frozen in multiple test volume aliquots.

**This yields 2x the concentration of the working solution.

2. Prior to use, allow the frozen aliquot to reach 20-25°C.
3. The frozen aliquot, at 2x the final concentration, must be further diluted to equal the total volume as calculated in the REAGENT PREPARATION section. Dilute each aliquot with the appropriate volume of PBS without 2% FCS and mix well.
4. Avoid repeated freeze/thaw cycles. This will denature the antibody protein.
5. Do not store in a self-defrosting freezer.

EVIDENCE OF DETERIORATION

Any change in the physical appearance of this reagent*, or any major variation in values obtained for control samples may indicate deterioration and the reagent should not be used. If the lyophilized material appears moist, do not use.

***Normal Appearance of Reagent**

Purified: Lyophilized-white plug
 Reconstituted - clear, colorless liquid

REAGENT PREPARATION

Reconstitute the lyophilized COULTER CLONE B4 reagent by adding 500 µL of distilled water to the vial. This is the stock solution. Centrifuge the stock solution at

20-25°C at 100,000 x g for 10 minutes to optimize staining results. Use this liquid reagent directly from the vial as the stock solution. The reagent working solution* is prepared as follows (volume listed is on a per test basis):

Add 5 µL stock solution to 195 µL PBS**.

*Diluted reagent working solution is good for day of preparation only.

**PBS - Phosphate Buffered Saline (pH=7.2).

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

USAGE

This reagent is for use with standard fluorescence microscopy and/or flow cytometry methodologies.

The use of B4 in this reagent is not intended for enumeration of CD19 cells in clinical diagnostic applications.

SELECTED RESEARCH REFERENCES

1. McMichael AJ, ed: 1987. Leukocyte Typing III. Oxford: Oxford University Press. p. 302-306, 308, 475.
2. Reinherz EL, Haynes BF, Nadler LM and Bernstein ID: 1986. Leukocyte Typing II. New York: Springer-Verlag, Vol 2, p. 8, 15-20, 37.
3. Drexler HG, Gignac SM and Minowada J: 1988. Routine immunophenotyping of acute leukaemias. Blut 57: 327-339.
4. Nadler LM, Anderson KC, Marti G, Bates M, Park E, 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.

PRODUCT AVAILABILITY

COULTER CLONE B4
[REF] A83478 - 100 tests (0.5 mL)

TRADEMARKS

Beckman Coulter Logo and COULTER CLONE are trademarks of Beckman Coulter, Inc.

For additional information, or if damaged product is received, call Beckman Coulter Customer Service at 800-526-7694 (USA or Canada) or contact your local Beckman Coulter Representative.

 Beckman Coulter, Inc.
 250 S. Kraemer Blvd.
 Brea, CA 92822
www.beckmancoulter.com

Printed in USA
 Made in USA

© 2009 Beckman Coulter, Inc.
 All Rights Reserved.