

**REF** A83480 - 100 tests

PN A83486-AA



	T8
<b>Specificity</b>	CD8
<b>Clone</b>	SFC121Thy2D3
<b>Hybridoma</b>	NS/1-AG4 x BALB/c
<b>Immunogen</b>	Human thymocytes. <sup>2,3,7,8</sup>
<b>Ig Chain</b>	IgG1 <sup>8</sup>
<b>Species</b>	Mouse
<b>Source</b>	Conditioned medium
<b>Purification</b>	Affinity chromatography
<b>Fluorescence</b>	Non Applicable
<b>Conjugation</b>	Non Applicable
<b>Molar Ratio</b>	Non Applicable
<b>Scatter Detection</b>	Forward and/or side

**ANALYTE SPECIFIC REAGENT**

Analytical and performance characteristics are not established.

**ANTIBODY SPECIFICITY**

The CD8 antigen has a molecular weight of 76 kd.<sup>12</sup> It is normally present on a majority of thymocytes (approximately 80%)<sup>3</sup> and approximately 30-35% of peripheral blood T lymphocytes.<sup>2,3</sup> The T8+ lymphocytes play a central role in regulating the immune response through suppressor and cytotoxic action.<sup>4,5,6</sup> The CD8 antigen reacts with the class I major histocompatibility complex (MHC) antigen on target cells.<sup>2</sup>

**REAGENT**

See table above.

**REAGENT CONTENTS**

The antibody concentration is 1.0 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% NaN<sub>3</sub>.

**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 or 0 to -20°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 T8 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 T8 in this reagent is not intended for enumeration of CD8 cells in clinical diagnostic applications.

**SELECTED RESEARCH REFERENCES**

1. McMichael AJ, ed: 1987. Leukocyte Typing III. Oxford: Oxford University Press. p. 199, 202, 206.
2. Reinherz EL, Meuer SC and Schlossman SF: 1983. The delineation of antigen receptors on human T lymphocytes. Immunol Today 4: 5-8.
3. Reinherz EL, Hussey RE, Fitzgerald K, Snow P, Terhorst C and Schlossman SF: 1981. Antibody directed at a surface structure inhibits cytolytic but not suppressor function of human T lymphocytes. Nature 294: 168-170.
4. Morimoto C, Letvin NL, Distaso JA, Aldrich WR and Schlossman SF: 1985. The isolation and characterization of the human suppressor inducer T cell subset. J Immunol 134: 1508-1515.
5. Morimoto C, Letvin NL, Distaso JA Brown, HM and Schlossman SF: 1986. The cellular basis for the induction of antigen-specific T8-suppressor cells. Eur J Immunol 16: 198-204.
6. Meuer SC, Schlossman SF and Reinherz EL: 1982. Clonal analysis of human cytotoxic T lymphocytes: T8+ and T8+ effector T cells recognize products of different major histocompatibility regions. Proc Natl Acad Sci USA 79: 4395-4399.
7. Reinherz EL, Kung PC, Goldstein G and Schlossman SF: 1979. A monoclonal antibody with selective reactivity with functionally mature human thymocytes and all peripheral human T cells. J Immunol 123: 1312-1317.
8. Reinherz EL, Haynes BF, Nadler LM and Bernstein ID: 1986. Leukocyte Typing II. New York: Springer-Verlag. Vol. 1, p. 8-9.

**PRODUCT AVAILABILITY**

COULTER CLONE T8  
 [REF] A83480 - 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](http://www.beckmancoulter.com)

Printed in USA  
 Made in USA

© 2009 Beckman Coulter, Inc.  
 All Rights Reserved.