

**CYTO-STAT®/  
COULTER CLONE®  
CD3-PC5**

REF 6607010 - 50 tests

PN 4238032-C



**ANALYTE SPECIFIC REAGENT**

Analytical and performance characteristics are not established.

**ANTIBODY SPECIFICITY**

The antibody to CD3 antigen is specific for the epsilon chain of the five chain CD3 component of the TCR complex.<sup>1,2</sup> The molecular weight of this chain is 20 kD.<sup>2</sup> It is a lineage-specific 'pan T cell' antigen that is normally present on the cell surface of mature thymocytes and resting and activated peripheral blood T lymphocytes (both inducer and suppressor/cytotoxic populations).<sup>3,5,6</sup>

**REAGENT**

CYTO-STAT/COULTER CLONE CD3-PC5  
Monoclonal Antibody  
PN 6607010 - 50 tests (0.5 mL)

**CLONE:** UCHT1 was derived from the hybridization of mouse NS-1 myeloma cells with spleen cells from BALB/c mice immunized with peripheral blood lymphocytes and human thymocytes from a person with Sezary cell leukemia.<sup>4,7</sup>

**Ig CHAIN:** Mouse IgG1 heavy chain and kappa light chains.

**SOURCE:** Mouse ascites fluid

**PURIFICATION:** Affinity chromatography

**CONJUGATION:** CD3-PC5 (Phycoerythrin-Cy5)

**MOLAR RATIO:** PC5/protein 0.5-1.5

**FLUORESCENCE:**

PC5 (Deep Red) Excites at 486-580 nm  
Emits at 660-680 nm

**REAGENT CONTENTS**

The concentration of nonantibody reagents is 0.2% BSA, 0.01 M potassium phosphate, 0.15 M NaCl, 0.1% Na<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 reagent 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 this reagent (clear colorless to pinkish liquid) or any major variation in values obtained for control samples may indicate deterioration and the reagent should not be used.

**REAGENT PREPARATION**

No preparation is necessary. 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 CD3-PC5 in this reagent is not intended for enumeration of CD3 cells in clinical diagnostic applications.

**SELECTED RESEARCH REFERENCES**

1. McMichael AJ, Beverley PCL, Cobbold S, Crompton MJ, Gilks W, Gotch FM, Hogg N, Horton M, Ling N, MacLennan ICM, Mason DY, Milstein C, Spiegelhalter D and Waldman H, eds: 1987. *Leukocyte Typing III*. Oxford University Press, Oxford, UK.
2. Barclay AN, Birkeland ML, Brown MH, Beyers AD, Davis SJ, Somoza C, Williams AF, eds: 1993. *The Leukocyte Antigen Facts Book*. Academic Press, London. p. 106-109.
3. Reinherz EL and Schlossman SF: 1980. The differentiation and function of human T lymphocytes. *Cell* 19:821-827.
4. Bernard A, Bomsell L, Dausset J, Milstein C and Schlossman SF, eds: 1984. *Leukocyte Typing*. Springer-Verlag, New York, NY.
5. Reinherz EL, Meuer S, Fitzgerald KA, Hussey RE, Levine H and Schlossman SF: 1982. Antigen recognition by human T lymphocytes is linked to surface expression of the T3 molecular complex. *Cell* 30:735-743.
6. Meuer SC, Acuto O, Hussey RE, Hodgdon JC, Fitzgerald KA, Schlossman SF and Reinherz EL: 1983. Evidence for the T3-associated 90K heterodimer as the T-cell antigen receptor. *Nature* 303:808-810.
7. Beverley PCL and Callard RE: 1981. Distinctive functional characteristics of human T lymphocytes defined by E rosetting or a monoclonal anti-T cells antibody. *Eur J Immunol* 11:329-334.

**PRODUCT AVAILABILITY**

CYTO-STAT/COULTER CLONE CD3-PC5  
PN 6607010 - 50 tests (0.5 mL)

PC5 is licensed under patents 4,542,104 and 4,520,110.  
Cy5 is licensed under patents 4,981,977 and 5,268,486.

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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