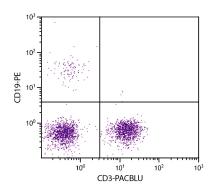
# SouthernBiotech



# Mouse Anti-Human CD3

Cat. No.	Format	Size
9515-01	Purified (UNLB)	0.1 mg
9515-02	Fluorescein (FITC)	100 tests
9515-02S	Fluorescein (FITC)	25 tests
9515-08	Biotin (BIOT)	100 tests
9515-09	R-phycoerythrin (PE)	100 tests
9515-09S	R-phycoerythrin (PE)	25 tests
9515-11	Allophycocyanin (APC)	100 tests
9515-11S	Allophycocyanin (APC)	25 tests
9515-13	Spectral Red® (SPRD)	100 tests
9515-14	Low Endotoxin, Azide-Free (LE/AF)	0.5 mg
9515-15	Cyanine 5 (CY5)	100 tests
9515-16	R-phycoerythrin-Cyanine 5.5 (PE/CY5.5)	100 tests
9515-17	R-phycoerythrin-Cyanine 7 (PE/CY7)	100 tests
9515-19	Allophycocyanin-Cyanine 7 (APC/CY7)	100 tests
9515-26	Pacific Blue™ (PACBLU)	100 tests
9515-27	Alexa Fluor® 700 (AF700)	100 tests
9515-30	Alexa Fluor® 488 (AF488)	100 tests
9515-31	Alexa Fluor® 647 (AF647)	100 tests



Human peripheral blood lymphocytes were stained with Mouse Anti-Human CD3-PACBLU (SB Cat. No. 9515-26) and Mouse Anti-Human CD19-PE (SB Cat. No. 9340-09).

#### **Overview**

Clone UCHT1

Isotype Mouse (BALB/c) IgG₁κ

Immunogen Human peripheral blood lymphocytes from a patient with Sézary's syndrome and infant thymocytes

Specificity Human CD3; Mr 20 kDa Alternate Name(s) CD3ε, T3E, TCRE, Leu-4, T3

Workshop I T3; III 126, 208, 471; IV T3.2; VI 6T-CD3, 6T-CD3.1

#### **Description**

CD3, a member of the immunoglobulin superfamily of cell surface receptors, is comprised of five invariable chains ranging from 16-28 kDa and is closely associated with the T cell antigen receptor (TCR). CD3 is expressed on 70-80% of normal peripheral blood lymphocytes and on 10-20% of thymocytes. It plays a major role in signaling during antigen recognition, leading to T cell activation. The monoclonal antibody UCHT1 reacts with the 20 kDa  $\epsilon$  chain of the CD3/TCR complex.

#### **Applications**

FC - Quality tested 1,6-11

IHC-FS – Reported in literature 4,5

IHC-PS - Reported in literature 5

ICC - Reported in literature 1

IP – Reported in literature <sup>2</sup>

WB – Reported in literature <sup>3</sup>

Activ – Reported in literature 1,2

Block – Reported in literature <sup>2</sup>

### **Working Dilutions**

Flow Cytometry Purified (UNLB) antibody

 $\leq 1~\mu g/10^6~cells$ 

FITC, BIOT, PE, APC, SPRD, CY5, PE/CY5.5, PE/CY7, APC/CY7, PACBLU, AF488, AF647, and AF700 conjugates

 $10 \mu L/10^6$  cells

For flow cytometry, the suggested use of these reagents is in a final volume of 100  $\mu$ L

Other Applications

Since applications vary, you should determine the optimum working dilution for the product that is appropriate for your specific need.

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## **Handling and Storage**

- The purified (UNLB) antibody is supplied as 0.1 mg of purified immunoglobulin in 1.0 mL of borate buffered saline, pH 8.2. No
  preservatives or amine-containing buffer salts added. Store at 2-8°C.
- The fluorescein (FITC) conjugate is supplied as 25 tests in 0.25 mL or 100 tests in 1.0 mL of PBS/NaN<sub>3</sub>. Store at 2-8°C.
- The biotin (BIOT) conjugate is supplied as 100 tests in 1.0 mL of PBS/NaN<sub>3</sub>. Store at 2-8°C.
- The R-phycoerythrin (PE) and allophycocyanin (APC) conjugates are supplied as 25 tests in 0.25 mL or 100 tests in 1.0 mL of PBS/NaN₃ and a stabilizing agent. Store at 2-8°C. **Do not freeze!**
- The Spectral Red<sup>®</sup> (SPRD), R-phycoerythrin-Cyanine 7 (PE/CY7), R-phycoerythrin-Cyanine 5.5 (PE/CY5.5), and allophycocyanin-Cyanine 7 (APC/CY7) conjugates are supplied as 100 tests in 1.0 mL of PBS/NaN₃ and a stabilizing agent. Store at 2-8°C. **Do not freezel**
- The low endotoxin, azide-free (LE/AF) antibody is supplied as 0.5 mg purified immunoglobulin in 1.0 mL of PBS. Contains no
  preservative; handle under aseptic conditions. Store at 2-8°C or aliquot into smaller volumes and store at -20°C. Avoid multiple
  freeze / thaw cycles.
- The Cyanine 5 (CY5), Alexa Fluor® 488 (AF488), Alexa Fluor® 647 (AF647), Alexa Fluor® 700 (AF700), and Pacific Blue™ (PACBLU) conjugates are supplied as 100 tests in 1.0 mL of PBS/NaN₃. Store at 2-8°C.
- Protect fluorochrome-conjugated forms from light. Reagents are stable for the period shown on the label if stored as directed.

#### Warning

Some reagents contain sodium azide. Please refer to product specific SDS.

#### References

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- 2. Burns GF, Boyd AW, Beverley PC. Two monoclonal anti-human T lymphocyte antibodies have similar biologic effects and recognize the same cell surface antigen. J Immunol. 1982;129:1451-7. (IP, Activ, Block)
- 3. van Dongen JJ, Krissansen GW, Wolvers-Tettero IL, Comans-Bitter WM, Adriaansen HJ, Hooijkaas H, et al. Cytoplasmic expression of the CD3 antigen as a diagnostic marker for immature T-cell malignancies. Blood. 1988;71:603-12. (WB)
- 4. Patey-Mariaud de Serre N, Cellier C, Jabri B, Delabesse E, Verkarre V, Roche B, et al. Distinction between coeliac disease and refractory sprue: a simple immunohistochemical method. Histopathology. 2000;37:70-7. (IHC-FS)
- 5. Pollard K, Lunny D, Holgate CS, Jackson P, Bird CC. Fixation, processing, and immunochemical reagent effects on preservation of T-lymphocyte surface membrane antigens in paraffin-embedded tissue. J Histochem Cytochem. 1987;35:1329-38. (IHC-FS, IHC-PS)
- 6. Nistala K, Moncrieffe H, Newton KR, Varsani H, Hunter P, Wedderburn LR. Interleukin-17-producing T cells are enriched in the joints of children with arthritis, but have a reciprocal relationship to regulatory T cell numbers. Arthritis Rheum. 2008;58:875-87. (FC)
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- 8. Farag MM, Weigand K, Encke J, Momburg F. Activation of natural killer cells by hepatitis C virus particles in vitro. Clin Exp Immunol. 2011;165:352-62. (FC)
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- 10. Domaica CI, Fuertes MB, Uriarte I, Girart MV, Sardañons J, Comas DI, et al. Human natural killer cell maturation defect supports in vivo CD56<sup>bright</sup> to CD56<sup>dim</sup> lineage development. PLoS One. 2012;7(12):e51677. (FC)
- 11. Henn AD, Wu S, Qiu X, Ruda M, Stover M, Yang H, et al. High-resolution temporal response patterns to influenza vaccine reveal a distinct human plasma cell gene signature. Sci Rep. 2013;3:2327. (FC)

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