



## Bi-Test™ CD3 FITC - CD28 PE

**Product:** Anti-human T cell monoclonal I antibody and anti-human CD28 receptor monoclonal antibody.

**Description:** The CD3 epitope is expressed on the epsilon chain of the CD3/T cell antigen receptor (TcR) complex. CD3 is expressed on 65-85% of thymocytes and has a mitogenic effect on peripheral blood T cells. Identification of human T cells expressing the 22-28,000 M. W. surface antigen. Anti-human CD28 binds the 44kDa MW cell surface protein on the surface of most T cells. CD28 acts as the ligand for the B7/BB-1 molecule on the surface of activated B cells. B7/BB-1 co-stimulates T cells through CD28, along with CD2 and CD3. CD28 antigen is a disulfide-linked homodimeric glycoprotein. The CD28 antigen is present on approximately 60%-80% of lymphocytes (95% of CD4 and 50% of CD8 lymphocytes). CD28 regulates the expression of cytokines by T cells, not only IL-2, but also IL-1 alpha and CSF-1, usually synthesized by accessory cells. CD28 functions as a cell adhesion molecule (CAM) for certain T cell subsets.

**Isotype:** Mouse IgG1 kappa (FITC) and Mouse IgG1 kappa (PE)

**Clones:** M2AB (CD3 FITC) and B23 (CD28 PE)

**Applications:** Monitoring of T cells subsets in peripheral blood; Characterization of subtypes of T cell leukemia's and lymphomas; Studies of AIDS/HIV virus infection; Analysis of CD3 complex related to the T cell antigen receptor; Study of T lymphocyte cytokine function; Study of B cell activation; Study of Cell-adhesion molecules relating T & B lymphocytes.

**Use: PBMC:** Add 10  $\mu$ l of MAB/10<sup>6</sup> PBMC in 100  $\mu$ l PBS. Mix gently and incubate for 15 minutes at 2<sup>0</sup> to 8<sup>0</sup>C. Wash twice with PBS and analyze or fix with 0.5% v/v of paraformaldehyde in PBS and analyze.

**WHOLE BLOOD:** Add 10  $\mu$ l of MAB/100  $\mu$ l of whole blood. Mix gently and incubate for 15 minutes at room temperature 20<sup>0</sup>C. Lyse the whole blood. Wash once with PBS and analyze or fix with 0.5% v/v of paraformaldehyde in PBS and analyze. See instrument manufacturer's instructions for Lysed Whole Blood and Immunofluorescence analysis with a flow cytometer or microscope.

**Storage:** Antibodies are supplied in PBS, 0.08% sodium azide and 0.2% protein carrier for FITC and PE. Antibodies should be stored at 4-8<sup>0</sup>C. Monoclonal antibodies should not be frozen. Reagents are stable for the period shown on the vial label when stored properly.

| Ordering Information: | Form     | Vial Size | Catalog # |
|-----------------------|----------|-----------|-----------|
|                       | Bi-Test™ | 50 Test   | 0328s     |
|                       | Bi-Test™ | 100 Test  | 0328      |

**For research use only. Not for use in human diagnostics or therapeutics.**

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