



Product Data Sheet

Human CD3 Antibodies and Conjugates

Cat# CD03UL-100	Mouse Anti-Human CD03 IgG, Unlabeled	Size: 100 ug
Cat# CD03F-100	Mouse Anti-Human CD03 IgG-FITC Conjugate	Size: 100 tests
Cat# CD03P-100	Mouse Anti-Human CD03 IgG-PE Conjugate	Size: 100 tests
Cat# CD03PC-100	Mouse Anti-Human CD03 IgG-PE-Cy5 Conjugate	Size: 100 tests

The CD3 (cluster of differentiation 3) T-cell co-receptor is a protein complex and is composed of four distinct chains. In mammals, the complex contains a CD3 γ chain, a CD3 δ chain, and two CD3 ϵ chains. These chains associate with a molecule known as the T-cell receptor (TCR) and the ζ -chain to generate an activation signal in T lymphocytes. The TCR, ζ -chain, and CD3 molecules together comprise the TCR complex. 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 Anti-CD3 mouse monoclonal antibody (IgG1) reacts with the 20 kDa ϵ chain of the CD3/TCR complex.

Matching isotype (IgG1) Controls

Catalog#	ProdDescription
20102-101	Mouse IgG1 isotype control, purified
20102-101-APC	Mouse IgG1-APC conjugate (isotype control)
20102-101-B	Mouse IgG1-Biotin conjugate (isotype control)
20102-101-F	Mouse IgG1-FITC conjugate (isotype control)
20102-101-FP	Mouse IgG1-FITC-PE conjugate control)
20102-101-HP	Mouse IgG1-HRP conjugate (isotype control)
20102-101-PC5	Mouse IgG1-PE-Cy5 conjugate control)
20102-101-PE	Mouse IgG1-PE conjugate (isotype control)

Cat# CD03UL-100, unlabeled

The antibody is supplied in PBS, pH 7.4, and 0.05% azide in either **lyophilized** (100 ug/100 tests) or **liquid** form (see lot specific volume indicated on the vial). Reconstitute powder in PBS. Store at -2-4oC. Stability is ~6-12 months. Do not freeze and thaw.

Cat# CD03F-100, FITC-conjugate

Purified antibody (IgG1) was coupled to FITC at F/P ratio ~5. The antibody is supplied in PBS, pH 7.4, 1% BSA (see lot sp concn on the vial) or in powder form. **Reconstitute** powder in PBS. Store at -20oC in suitable aliquots. Stability is ~6-12 months. Do not freeze/thaw.

Suggested conjugate dilutions are 1:20-1:500 for immunofluorescence. Or 1 test equivalent of antibody per million cells.

Absorption @495 nm Emission @528 nm

Cat# CD03P-100, PE-conjugate

The purified antibody was coupled to R-Phycoerythrin (R-PE) (Molecular Weight 240,000 daltons) from seaweed using proprietary methods (A565nm/A280nm ~3-4).

Absorption @490 nm, 545 nm and 565 nm
Emission Wavelength: 580 nm

The conjugate is provided in PBS, pH 7.5, containing 0.1% bovine serum albumin, (BSA) 0.05% sodium azide and stabilizing agent). DO NOT FREEZE. The product should be stored at 4oC and is stable for a minimum of 1 year. Do not store diluted solutions.

Recommended usage 1 test equivalent of antibody per million cells for Flow cytometry or FACS. Due to many experimental variations, optimum concn must be determined for a given applications

Cat# CD03PC-100, PE-Cy5-conjugate

Purified antibody was coupled to PE-Cy5.5 (Cyanine 5.29-OSu) (Molecular Weight 975 daltons) at F/P ratio ~6:1. The antibody is supplied in PBS, pH 7.4, 0.5% BSA, IgG, and 0.05% azide in either **lyophilized** or **liquid** form (see lot specific concn on the vial). Reconstitute powder in PBS. Store at -20oC in suitable aliquots. Stability is ~6-12 months. Do not freeze and thaw.

Suggested applications: Suitable for immunomicroscopy and flow cytometry or FACS analysis as well as other antibody based fluorescent assays

Suggested conjugate dilutions are 1:100-1:500 for immunofluorescence. Users must optimize the dilutions for a given technique. Or 1 test equivalent of antibody per million cells.

Absorption Wavelength: 650 nm
Emission Wavelength: 667 nm

Recommended Working Dilution for ELISA

Working dilution for the specific application should be determined by the investigator to obtain the best conditions and prepared immediately before use. Diluted solution should be discarded. This product can be used in immunodiffusion, ELISA, flow cytometry, immunofluorescence or immunolocalization.

For In vitro research use only.

References: beaten D (2000) Ann. Rheum. Dis. 59, 945-953; Beverly PCL (1981) Eur. J. Immunol. 11, 329; Viglietta V (2004) J. Exp. Med. 199, 971-979

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