

Product Data Sheet

**Human CD14 Antibodies and Conjugates**

<b>Cat#</b> CD14UL-100	Mouse Anti-Human CD14 IgG, Unlabeled	<b>Size:</b> 100 tests
<b>Cat#</b> CD14F-100	Mouse Anti-Human CD14 IgG-FITC Conjugate	<b>Size:</b> 100 tests
<b>Cat#</b> CD14P-100	Mouse Anti-Human CD14 IgG-PE Conjugate	<b>Size:</b> 100 tests
<b>Cat#</b> CD14PC-100	Mouse Anti-Human CD14 IgG-PE-Cy5 Conjugate	<b>Size:</b> 100 tests

Cluster of differentiation 14 also known as CD14 is a human gene. The protein encoded by this gene is a component of the innate immune system. CD14 exists in two forms. Either it is anchored into the membrane by a glycosylphosphatidylinositol tail (mCD14) or it appears in a soluble form (sCD14). Soluble CD14 either appears after shedding of mCD14 or is directly secreted from intracellular vesicles. CD14 McAb recognizes a 53-55KD glycosylphosphatidylinositol (GPI)-anchored single chain glycoprotein, which is found on cells of myelomonocytic lineage including monocytes (strongly), granulocytes (weakly) and also on most tissue macrophages. CD14 antigen is also present on reticular dendritic cells, some langerhans cells, and B lymphocytes (weakly), but is absent from T lymphocytes, NK cells, erythrocytes and platelets. CD14 functions as a high affinity receptor for the complex of lipopolysaccharide (LPS-endotoxin) and LPS-binding protein (LBP), and is the major receptor involved in the lethal response to both endotoxin and Gram-negative bacteria. In addition to membrane CD14, soluble form of CD14 can be detected in serum and tissue culture supernatants of cells transfected with CD14.

Monoclonal anti-human Anti-CD14 antibody is produced in mouse (IgG1k). It is purified by Protein A/G and coupled to FITC, PE, Cy5 etc).

**Matching isotype Controls**

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

**Cat# CD14UL-100, unlabeled**

The antibody is supplied in PBS, pH 7.4, and 0.05% azide in either **lyophilized** (100 tests) or **liquid** form (100 tests/500 ul or the 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# CD14F-100, FITC-conjugate**

Purified antibody was coupled to FITC at F/P ratio ~5. The antibody is supplied (100 tests) 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# CD14P-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# CD14PC-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.

**Related Material available for ADI**

CD14-ul-f-pe 101223A

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