ALPHA DIAGNOSTIC INTERNATIONAL

LIFE TECH Life Technologies™ Your Molecular & Cell Technology Partner

Product Data Sheet

Human CD71 Antibodies and Conjugates

☐ **Cat#**	CD071UL-100	Mouse Anti-Human CD71, Unlabeled	Size: 100 ug
☐ **Cat#**	CD071F-100	Mouse Anti-Human CD71-FITC conjugate	Size: 100 tests
☐ **Cat#**	CD071P-100	Mouse Anti-Human CD8-PE conjugate	Size: 100 tests
☐ **Cat#**	CD071PC-100	Mouse Anti-Human CD8-PE-Cy5-conjugate	Size: 100 tests

CD71 is a 95kD type II heterodimeric transmembrane glycoprotein that is the receptor for transferrin. CD71 expression is very low on resting leukocytes but is upregulated upon activation. CD71 plays a critical role in cell proliferation by controlling the supply of iron, which is essential for many metabolic pathways, through the binding and endocytosis of transferrin.1-4
CD71 McAb CD71. CD71 antigen is expressed typically at high levels on all proliferating cell, activated cells and erythroblasts or reticulocytes, which require iron, but not on resting peripheral blood leucocytes and mature erythrocytes. CD71 antigen is also expressed at high levels on the cells of almost most neoplastic cell lines and 29-32% of bone marrow cells. There is soluble form of CD71 in serum (plasm) besides membrane form of CD71. Using CD71 McAb to detect soluble form of CD71 antigen is a new way for diagnosing anemia diseases after detecting the ferritin in the serum. HI160 McAb is a inhibitory antibody.

Matching isotype (IgG1) Controls

Catalog#	Product Description
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# CD071UL-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.(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#CD71F-100, FITC-conjugate

Purified antibody (IgG1) was coupled to FITC at F/P ratio ~5. The antibody is supplied in PBS, pH 7.4, (see lot sp conc. 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# CD071P-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 is ~10 ul/106 cells for Flow cytometry or FACS. Due to many experimental variations, optimum concn must be determined for a given applications

Cat# CD071PC-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, and 0.05% azide in either **lyophilized** or **liquid** forms (see lot specific conc on the vial). Reconstitute powder in PBS. Store at -20oC in suitable aliquots. Stability is ~6-12 months. Do not freeze and thaw.

Suggested conjugate dilutions are 1:100-1:500 for immunoflourescence. 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, immunoflourescence or immunolocalization.
For In vitro research use only.

STORAGE: For purified forms, long term storage at -20°C. For conjugated forms, storage at 4°C, should not be frozen and avoid prolonged exposure to light.

REFERENCES: Shen DC (1990). Shanghai J. of Immunology. 10(3):147; Yang CY (1993). Monoclonal Antibody. 9(4):42; Schlossman S (1995). White Cell Differentiation Antigens. P：247 ，353—356 Oxford University Press

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Alpha Diagnostic Intl Inc., 6203 Woodlake Center Dr, San Antonio, TX 78244, USA; **Email**: service@4adi.com

India Contact:
Life Technologies (India) Pvt. Ltd.
306, Aggarwal City Mall, Opposite M2K Pitampura, Delhi – 110034 (INDIA). Ph: +91-11-42208000, 42208111, 42208222, Mobile: +91-9810521400, Fax: +91-11-42208444
Email: customerservice@lifetechindia.com Website: www.lifetechindia.com