

CD71 (Transferrin Receptor) Monoclonal Antibody (OKT9 (OKT-9)), PE, eBioscience™

Product Details	
Size	100 Tests
Species Reactivity	Human
Published Species	Human
Host/Isotype	Mouse / IgG1, kappa
Recommended Isotype Control	Mouse IgG1 kappa Isotype Control (P3.6.2.8.1), PE, eBioscience™
Class	Monoclonal
Type	Antibody
Clone	OKT9 (OKT-9)
Conjugate	PE
Excitation/Emission Max	565/576 nm
Form	Liquid
Concentration	5 µL/Test
Purification	Affinity chromatography
Storage buffer	PBS, pH 7.2, with 0.2% BSA
Contains	0.09% sodium azide
Storage conditions	4° C, store in dark, DO NOT FREEZE!
RRID	AB_10717077

Applications	Tested Dilution	Publications
Flow Cytometry (Flow)	5 µL (0.06 µg)/test	28 Publications

Product Specific Information

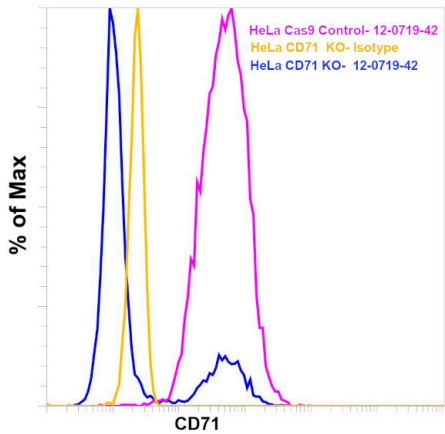
Description: The OKT9 monoclonal antibody reacts with human CD71, a 170-180 kDa type II transmembrane protein. CD71, the transferrin receptor, exists as a homodimer on the cell surface and is essential for cellular growth. CD71 is expressed by immature proliferating cells and at low levels on resting mature lymphocytes. Antigen or mitogen stimulation of T and B cells upregulates the expression of CD71.

Applications Reported: This OKT9 (OKT-9) antibody has been reported for use in flow cytometric analysis.

Applications Tested: This OKT9 (OKT-9) antibody has been pre-titrated and tested by flow cytometric analysis of stimulated human peripheral blood mononuclear cells. This can be used at 5 µL (.06 µg) per test. A test is defined as the amount (µg) of antibody that will stain a cell sample in a final volume of 100 µL. Cell number should be determined empirically but can range from 10⁵ to 10⁸ cells/test.

Excitation: 488-561 nm; **Emission:** 578 nm; **Laser:** Blue Laser, Green Laser, Yellow-Green Laser.

Filtration: 0.2 µm post-manufacturing filtered.

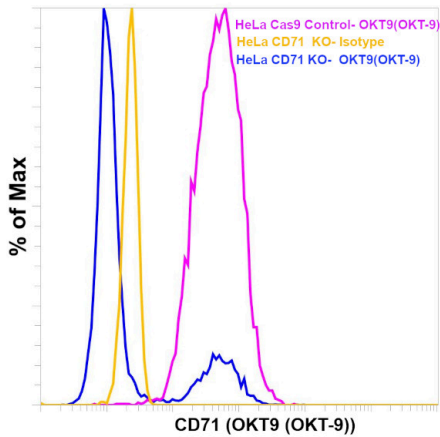


CD71 (Transferrin Receptor) Antibody (12-0719-42) in Flow

Knockout of CD71 was achieved by CRISPR-Cas9 genome editing using LentiArray™ Lentiviral sgRNA (Product # A32042, Assay ID CRISPR944258_LV) and LentiArray Cas9 Lentivirus (Product # A32064). Flow cytometry analysis of CD71 was performed by staining HeLa CD71 knock out cells with 0.06 µg Mouse IgG1 kappa Isotype Control (P3.6.2.8.1), PE, eBioscience™ (Product # 12-4714-42, yellow histogram) and 0.2 mg/mL CD71 (Transferrin Receptor) Monoclonal Antibody (OKT9 (OKT-9)), PE, eBioscience™ (Product # 12-0719-42, blue histogram). HeLa Cas9 control cells were also stained with CD71 (Transferrin Receptor) Monoclonal Antibody (OKT9 (OKT-9)), PE, eBioscience™ (Product # 12-0719-42, pink histogram). Loss of signal was observed in the CD71 KO cells stained with CD71 antibody clone (OKT9 (OKT-9)) but not in the control Cas9 cells. Viable cells were used for analysis, as determined by Fixable Viability Dye eFluor™780 (Product # 65-0865-18).

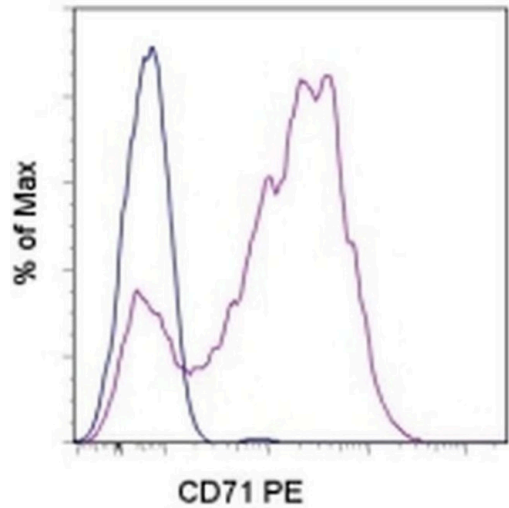
CD71 (Transferrin Receptor) Antibody (12-0719-42)

Antibody clone (OKT9 (OKT-9)) specificity was demonstrated by CRISPR-Cas9 mediated knockout of target protein. Loss of signal was observed for target protein in CD71 KO cells (blue histogram) compared to the control Cas9 cells (pink histogram) using CD71 antibody (OKT9 (OKT-9)). Yellow histogram represents staining with the isotype control. {KO}



CD71 (Transferrin Receptor) Antibody (12-0719-42) in Flow

Staining of 3-day anti-CD3/CD28-stimulated normal human peripheral blood cells with Mouse IgG1 kappa Isotype Control PE (Product # 12-4714-81) (blue histogram) or Anti-Human CD71 (Transferrin Receptor) PE (purple histogram). Total viable cells were used for analysis.



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Flow Cytometry (28)

BMC biology

Rapid increase in transferrin receptor recycling promotes adhesion during T cell activation.

"Published figure using CD71 (Transferrin Receptor) monoclonal antibody (Product # 12-0719-42) in Flow Cytometry"

Authors: Rossatti P,Redpath GMI,Ziegler L,Samson GPB,Clamagirand CD,Legler DF,Rossy J

Year
2022

NPJ precision oncology

A patient-designed tissue-engineered model of the infiltrative glioblastoma microenvironment.

"Published figure using CD71 (Transferrin Receptor) monoclonal antibody (Product # 12-0719-42) in Flow Cytometry"

Authors: Cornelison RC,Yuan JX,Tate KM,Petrosky A,Beehly GF,Bloomfield M,Schwager SC,Berr AL,Stine CA,Cimini D,Bafakih FF,Mandell JW,Purow BW,Horton BJ,Munson JM

Year
2022

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More applications with references on thermofisher.com

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