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

| Product Details | |
|---|---|
| Size | 100 µg |
| Species Reactivity | Human |
| Published Species | Human, Mouse |
| Host/Isotype | Mouse / IgG1, kappa |
| Class | Monoclonal |
| Type | Antibody |
| Clone | OKT9 (OKT-9) |
| Conjugate | Unconjugated |
| Form | Liquid |
| Concentration | 0.5 mg/mL |
| Purification | Affinity chromatography |
| Storage buffer | PBS, pH 7.2 |
| Contains | 0.09% sodium azide |
| Storage conditions | 4° C |
| RRID | AB_467338 |

| Applications | Tested Dilution | Publications |
|---|---|---|
| Western Blot (WB) | 1:1,000 | - |
| Immunohistochemistry (IHC) | - | 1 Publication |
| Immunocytochemistry (ICC/IF) | 5 µg/mL | 2 Publications |
| Flow Cytometry (Flow) | 0.5 µg/test | 15 Publications |
| Functional Assay (FN) | - | 1 Publication |

## 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: The OKT9 (OKT-9) antibody has been reported for use in flow cytometric analysis.

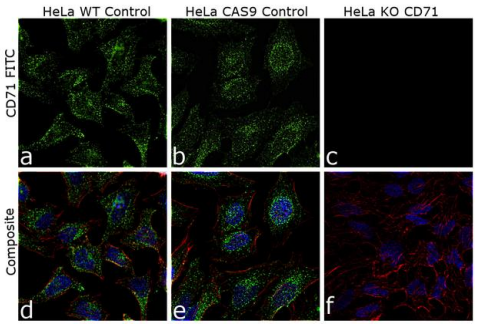
Applications Tested: This OKT9 (OKT-9) antibody has been tested by flow cytometric analysis of unstimulated and CD3/CD28-stimulated (3 days) human blood cells. This can be used at less than or equal to 0.5 µg per test. A test is defined as the amount (µg) of antibody that will stain a cell sample in a final volume of 100 µL. Cell number should be determined empirically but can range from 10^5 to 10^8 cells/test. It is recommended that the antibody be carefully titrated for optimal performance in the assay of interest.

Purity: Greater than 90%, as determined by SDS-PAGE.

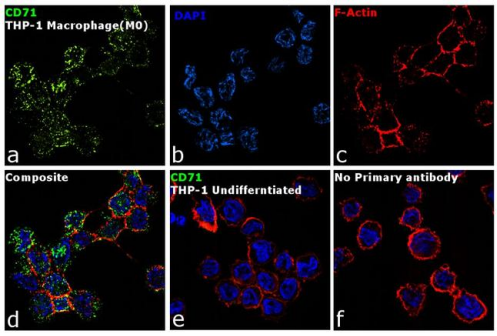
Aggregation: Less than 10%, as determined by HPLC.

Filtration: 0.2 µm post-manufacturing filtered.

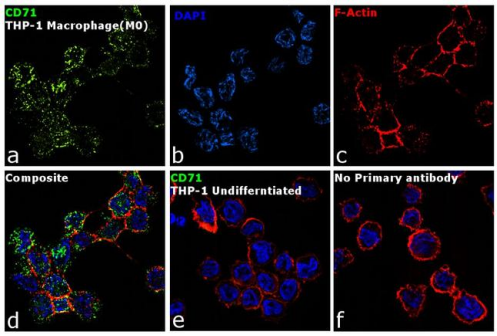
## Product Images For CD71 (Transferrin Receptor) Monoclonal Antibody (OKT9 (OKT-9)), eBioscience™




**CD71 (Transferrin Receptor) Antibody (14-0719-82)**
Antibody specificity was demonstrated by CRISPR-Cas9 mediated knockout of target protein. A loss of signal was observed for target protein in CD71 KO cell line compared to control cell line using CD71 (Transferrin Receptor) Monoclonal Antibody (OKT9 (OKT-9)), eBioscience™ (Product # 14-0719-82). {KO}




**CD71 (Transferrin Receptor) Antibody (14-0719-82) in ICC/IF**
Immunofluorescence analysis of CD71 was performed using 70% confluent log phase THP-1 cells differentiated into Macrophage (M0). The cells were fixed with 4% paraformaldehyde for 10 minutes, permeabilized with 0.1% Triton™ X-100 for 15 minutes, and blocked with 1% BSA for 1 hour at room temperature. The cells were labeled with CD71(Transferrin Receptor) Mouse Monoclonal Antibody (OKT9 (OKT-9)) (Product # 14-0719-80) at 5 µg/mL in 0.1% BSA, incubated at 4 degree Celsius overnight and then labeled with Goat anti-Mouse IgG (H+L) Superclonal™ Secondary Antibody, Alexa Fluor® 488 conjugate (Product # A28175) at a dilution of 1:2000 for 45 minutes at room temperature (Panel a: green). Nuclei (Panel b: blue) were stained with ProLong™ Diamond Antifade Mountant with DAPI (Product # P36962). F-actin (Panel c: red) was stained with Rhodamine Phalloidin (Product # R415, 1:300). Panel d represents the merged image showing membrane localization. Panel e shows untreated cells with no signal. Panel f represents control cells with no primary antibody to assess background. The images were captured at 60X magnification.




**CD71 (Transferrin Receptor) Antibody (14-0719-82)**
Altered expression of target protein upon cell treatment demonstrates antibody specificity. Immunofluorescence analysis of CD71 using Anti-CD71 Mouse Monoclonal Antibody (OKT9 (OKT-9)) (Product # 14-0719-80) shows increased expression of proteins in THP-1 cell line upon differentiation into Macrophage (M0). {TM}

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## 19 References

### Immunohistochemistry (1)

**PloS one**

**Ferristatin II promotes degradation of transferrin receptor-1 in vitro and in vivo.**

"14-0719 was used in Immunohistochemistry-immunofluorescence to show that ferristatin II degrades transferrin receptor-1 through a nystatin-sensitive lipid raft pathway in rats."

Authors: Byrne SL,Buckett PD,Kim J,Luo F,Sanford J,Chen J,Enns C,Wessling-Resnick M

**Species**
Human

**Dilution**
Not Cited

**Year**
2014

### Immunocytochemistry (2)

**Oncogene**

**Terminal differentiation and loss of tumorigenicity of human cancers via pluripotency-based reprogramming.**

"Published figure using CD71 (Transferrin Receptor) monoclonal antibody (Product # 14-0719-82) in Immunofluorescence"

Authors: Zhang X,Cruz FD,Terry M,Remotti F,Matushansky I

**Species**
Not Applicable

**Dilution**
Not Cited

**Year**
2013

**Glycobiology**

**Epitope mapping, expression and post-translational modifications of two isoforms of CD33 (CD33M and CD33m) on lymphoid and myeloid human cells.**

"14-0719 was used in Immunofluorescence to determine the expression and localisation of the two CD33 isoforms on several hematopoietic cell lines."

Authors: Pérez-Oliva AB,Martínez-Esparza M,Vicente-Fernández JJ,Corral-San Miguel R,García-Peñarrubia P,Hernández-Caselles T

**Species**
Human

**Dilution**
Not Cited

**Year**
2011

### Flow Cytometry (15)

**Cell reports. Medicine**

**Immune cell phenotypes associated with disease severity and long-term neutralizing antibody titers after natural dengue virus infection.**

"14-0719-82 was used in Flow Cytometry to reveal associations between cellular profiles and disease severity, opening opportunities to study immunopathology in dengue disease and the potential predictive value of these parameters."

Authors: Rouers A,Chng MHY,Lee B,Rajapakse MP,Kaur K,Toh YX,Sathiakumar D,Loy T,Thein TL,Lim VWX,Singhal A,Yeo TW,Leo YS,Vora KA,Casimiro D,Lim B,Tucker-Kellogg L,Rivino L,Newell EW,Fink K

**Species**
Human

**Dilution**
Not Cited

**Year**
2021

View more Flow references on thermofisher.com

### More applications with references on thermofisher.com

### FN (1)