

CD71 Monoclonal antibody

Catalog Number: 66180-1-Ig

Featured Product

16 Publications

Basic Information

Catalog Number:

66180-1-Ig

Size:

1500 µg/ml

Source:

Mouse

Isotype:

IgG2a

Immunogen Catalog Number:

AG21612

GenBank Accession Number:

BC001188

GeneID (NCBI):

7037

ENSEMBL Gene ID:

ENSG00000072274

UNIPROT ID:

P02786

Full Name:

transferrin receptor (p90, CD71)

Calculated MW:

85 kDa

Observed MW:

90 kDa

Purification Method:

Protein A purification

CloneNo.:

3C11F11

Recommended Dilutions:

WB 1:5000-1:50000

IP 0.5-4.0 µg for 1.0-3.0 mg of total protein lysate

IHC 1:2000-1:8000

IF 1:200-1:800

Applications

Tested Applications:

FC, IF/ICC, IF-P, IHC, IP, WB, ELISA

Cited Applications:

WB, IF, IHC, Blocking assay

Species Specificity:

human

Cited Species:

human

Note-IHC: suggested antigen retrieval with TE buffer pH 9.0; (*) Alternatively, antigen retrieval may be performed with citrate buffer pH 6.0

Positive Controls:

WB: U-251 cells, Raji cells, A549 cells, TF-1 cells, HeLa cells, U2OS cells, A431 cells, HepG2 cells, K-562 cells

IP: HeLa cells,

IHC: human placenta tissue, human breast cancer tissue

IF: human breast cancer tissue, MCF-7 cells

Background Information

CD71, also known as transferrin receptor protein 1 (TfR1), is a transmembrane glycoprotein composed of two disulfide-linked monomers, each of 90 kDa molecular weight. Each monomer binds one holo-transferrin molecule creating an iron-Tf-TfR complex which enters the cell by endocytosis. CD71 is present on actively proliferating cells and is essential for iron transport into proliferating cells.

Notable Publications

| Author | Pubmed ID | Journal | Application |
|---------------|-----------|---------------------|-------------|
| Ping Han | 36309297 | Free Radic Biol Med | WB |
| Lingjuan Wang | 34732689 | Cell Death Discov | WB |
| Yangli Tian | 34081703 | PLoS Genet | WB |

Storage

Storage:

Store at -20°C. Stable for one year after shipment.

Storage Buffer:

PBS with 0.02% sodium azide and 50% glycerol pH 7.3.

Aliquoting is unnecessary for -20°C storage

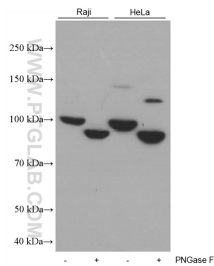
For technical support and original validation data for this product please contact:

T: 4006900926

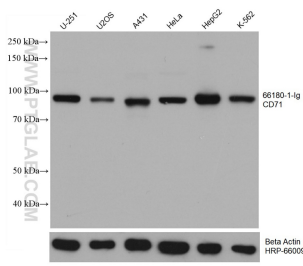
E: Proteintech-CN@ptglab.comW: ptgcn.com

This product is exclusively available under Proteintech Group brand and is not available to purchase from any other manufacturer.

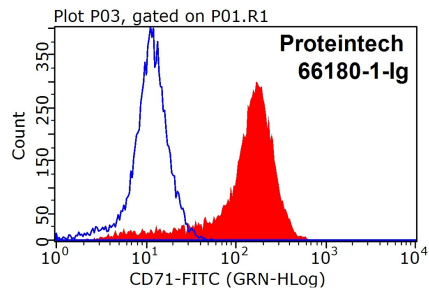
Selected Validation Data



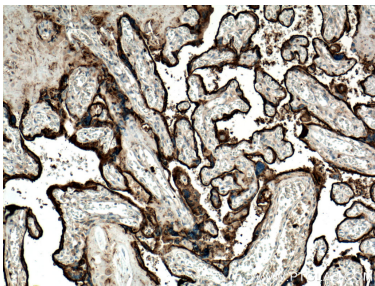
Untreated and PNGase F-treated lysates of Raji cells and HeLa cells were subjected to SDS PAGE followed by western blot with 66180-1-Ig (CD71 antibody) at dilution of 1:10000 incubated at room temperature for 1.5 hours. PNGase F was obtained from Atagenix (cat.NO. ata808).



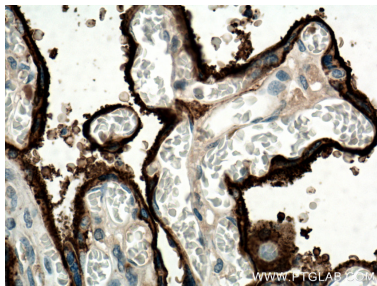
Various lysates were subjected to SDS PAGE followed by western blot with 66180-1-Ig (CD71 antibody) at dilution of 1:20000 incubated at room temperature for 1.5 hours. The membrane was stripped and reblotted with HRP-conjugated Beta Actin Monoclonal antibody (HRP-66009) as loading control.



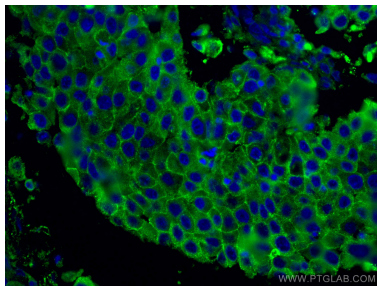
1X10⁶ Raji cells were stained with 0.2ug CD71 antibody (66180-1-Ig, red) and control antibody (blue). Fixed with 4% PFA blocked with 3% BSA (30 min). FITC-Goat anti-mouse IgG with dilution 1:100.



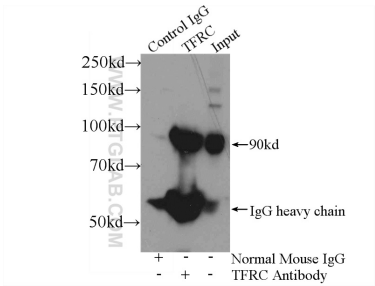
Immunohistochemical analysis of paraffin-embedded human placenta tissue slide using 66180-1-Ig (CD71 antibody) at dilution of 1:4000 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Immunohistochemical analysis of paraffin-embedded human placenta tissue slide using 66180-1-Ig (CD71 antibody) at dilution of 1:4000 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Immunofluorescent analysis of (4% PFA) fixed human breast cancer tissue using CD71 antibody (66180-1-Ig, Clone: 3C11F11) at dilution of 1:400 and CoraLite@488-Conjugated AffiniPure Goat Anti-Mouse IgG(H+L).



IP result of anti-CD71 (IP:66180-1-Ig, 5ug; Detection:66180-1-Ig 1:1000) with HeLa cells lysate 2400ug.