

Anti-Transferrin Receptor (CD71) Antibody [JF0956]

ET1702-06



Product Type:	Recombinant Rabbit monoclonal IgG, primary antibodies
Species reactivity:	Human, Mouse, Rat
Applications:	WB, IP, FC
Molecular Wt:	Predicted band size: 85 kDa
Clone number:	JF0956

Description: CD71, also known as the transferrin receptor (TFR), is a type II membrane glycoprotein that exists as a disulfide-linked homodimer of two identical subunits. CD71 binds to two molecules of transferrin and a serum iron-transport protein, and directs the cellular uptake of iron via receptor-mediated endocytosis. CD71 is expressed, typically at high levels, on all proliferating cells, reticulocytes and erythroid precursors. It is not expressed on resting leukocytes, but is upregulated upon activation of lymphocytes, monocytes and macrophages. CD71 is also found on most dividing cells and on brain endothelium. A second transferrin receptor, TFR2, also mediates the uptake of transferrin-bound iron. TFR2 is a two-subunit homodimer and is highly expressed in liver as well as in hepatocytes and erythroid precursors. Mutations in the TFR2 gene result in hereditary hemochromatosis type III (HFE3), an iron overloading disorder predominant in Caucasians.

Immunogen: Synthetic peptide within Human CD71 aa 22-60 / 760.

Positive control: HeLa cell lysate, K-562 cell lysate, SW480 cell lysate, U-87 MG cell lysate, RAW264.7 cell lysate, mouse spleen tissue lysate, rat spleen tissue lysate, Hela.

Subcellular location: Cell membrane, Melanosome, Secreted.

Database links: SwissProt: P02786 Human | Q62351 Mouse | Q99376 Rat

Recommended Dilutions:

WB	1:1,000-1:5,000
FC	1:50-1:100
IP	Use at an assay dependent concentration.

Storage Buffer: 1*TBS (pH7.4), 0.05% BSA, 40% Glycerol. Preservative: 0.05% Sodium Azide.

Storage Instruction: Store at +4°C after thawing. Aliquot store at -20°C or -80°C. Avoid repeated freeze / thaw cycles.

Purity: Protein A affinity purified.

Hangzhou Huaan Biotechnology Co., Ltd.

Orders:0086-571-88062880

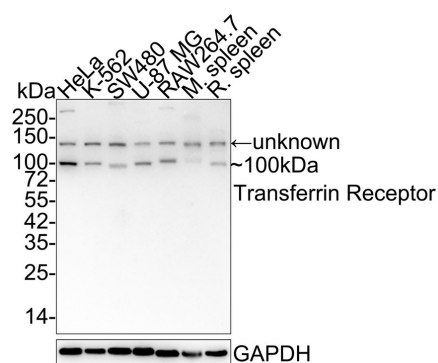
Technical:0086-571-89986345

Service mail:support@huabio.cn

华安生物
HUABIO
www.huabio.cn

Images

Fig1: Western blot analysis of Transferrin Receptor (CD71) on different lysates with Rabbit anti-Transferrin Receptor (CD71) antibody (ET1702-06) at 1/2,000 dilution.



Lane 1: HeLa cell lysate
 Lane 2: K-562 cell lysate
 Lane 3: SW480 cell lysate
 Lane 4: U-87 MG cell lysate
 Lane 5: RAW264.7 cell lysate
 Lane 6: Mouse spleen tissue lysate
 Lane 7: Rat spleen tissue lysate

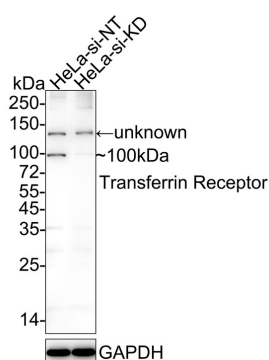
Lysates/proteins at 20 µg/Lane.

Predicted band size: 85 kDa
 Observed band size: 100 kDa

Exposure time: 5 minutes;
 4-20% SDS-PAGE gel.

Proteins were transferred to a PVDF membrane and blocked with 5% NFDm/TBST for 1 hour at room temperature. The primary antibody (ET1702-06) at 1/2,000 dilution was used in 5% NFDm/TBST at 4°C overnight. Goat Anti-Rabbit IgG - HRP Secondary Antibody (HA1001) at 1:50,000 dilution was used for 1 hour at room temperature.

Fig2: Western blot analysis of Transferrin Receptor (CD71) on different lysates with Rabbit anti-Transferrin Receptor (CD71) antibody (ET1702-06) at 1/1,000 dilution.



Lane 1: HeLa-si NT cell lysate
 Lane 2: HeLa-si Transferrin Receptor cell lysate

Lysates/proteins at 15 µg/Lane.

Predicted band size: 85 kDa
 Observed band size: 100 kDa

Exposure time: 1 minute 20 seconds;
 4-20% SDS-PAGE gel.

Proteins were transferred to a PVDF membrane and blocked with 5% NFDm/TBST for 1 hour at room temperature. The primary antibody (ET1702-06) at 1/1,000 dilution was used in 5% NFDm/TBST at room temperature for 2 hours. Goat Anti-Rabbit IgG - HRP Secondary Antibody (HA1001) at 1/50,000 dilution was used for 1 hour at room temperature.

Hangzhou Huaan Biotechnology Co., Ltd.

Orders:0086-571-88062880

Technical:0086-571-89986345

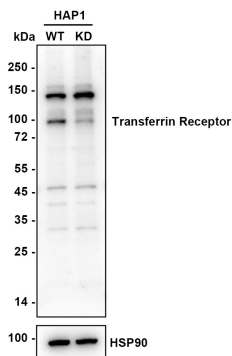
Service mail:support@huabio.cn

华安生物
 HUABIO
 www.huabio.cn

Fig3: Western blot analysis of Transferrin Receptor (CD71) on different lysates with Rabbit anti-Transferrin Receptor (CD71) antibody (ET1702-06) at 1/5,000 dilution.

Lane 1: HAP1 WT cell lysate

Lane 2: HAP1 Transferrin Receptor KD cell lysate



Lysates/proteins at 10 µg/Lane.

Predicted band size: 85 kDa

Observed band size: 90 kDa

Exposure time: 1 minute 48 seconds; ECL: K1802;

4-20% SDS-PAGE gel.

Proteins were transferred to a PVDF membrane and blocked with 5% NFDM/TBST for 1 hour at room temperature. The primary antibody (ET1702-06) at 1/5,000 dilution was used in TBST at 4°C overnight. Goat Anti-Rabbit IgG - HRP Secondary Antibody (HA1001) at 1/50,000 dilution was used for 1 hour at room temperature.

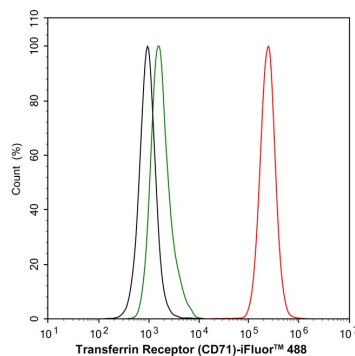


Fig4: Flow cytometric analysis of HeLa cells labeling Transferrin Receptor (CD71).

Cells were fixed and permeabilized. Then stained with the primary antibody (ET1702-06, 1µg/mL) (red) compared with Rabbit IgG Isotype Control (green). After incubation of the primary antibody at +4°C for an hour, the cells were stained with a iFluor™ 488 conjugate-Goat anti-Rabbit IgG Secondary antibody (HA1121) at 1/1,000 dilution for 30 minutes at +4°C. Unlabelled sample was used as a control (cells without incubation with primary antibody; black).

Note: All products are "FOR RESEARCH USE ONLY AND ARE NOT INTENDED FOR DIAGNOSTIC OR THERAPEUTIC USE".

Background References

1. Wang Y et al. Role of hemoglobin and transferrin in multi-wall carbon nanotube-induced mesothelial injury and carcinogenesis. *Cancer Sci* 107:250-7 (2016).
2. Song J et al. Native low density lipoprotein promotes lipid raft formation in macrophages. *Mol Med Rep* 13:2087-93 (2016).

Hangzhou Huan Biotechnology Co., Ltd.

Orders:0086-571-88062880

Technical:0086-571-89986345

Service mail:support@huabio.cn

华安生物
HUABIO
www.huabio.cn