Anti-Transferrin Antibody [E4-E6]

M1510-17

Product Type:	Mouse monoclonal IgG1, primary antibodies
Species reactivity:	Human, Mouse, Rat
Applications:	IF-Cell, IHC-P, FC, WB
Molecular Wt:	Predicted band size: 77 kDa
Clone number:	E4-E6

Description: Transferrins are iron binding transport proteins which can bind two Fe3+ ions in association with the binding of an anion, usually bicarbonate. It is responsible for the transport of iron from sites of absorption and heme degradation to those of storage and utilization. Serum transferrin may also have a further role in stimulating cell proliferation.

Immunogen: Native protein.

Positive control: Human plasma, human serum, H22, HepG2, rat uterus tissue, human liver tissue, human kidney tissue.

Subcellular location: Secreted.

Database links: SwissProt: P02787 Human | Q921I1 Mouse | P12346 Rat

Recommended Dilutions:

IF-Cell	1:50-1:200
IHC-P	1:50-1:200
FC	1:50-1:100
WB	1:1,000

Storage Buffer: 1*PBS (pH7.4), 0.2% BSA, 50% Glycerol. Preservative: 0.05% Sodium Azide.

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

Purity: Protein G affinity purified.

Images

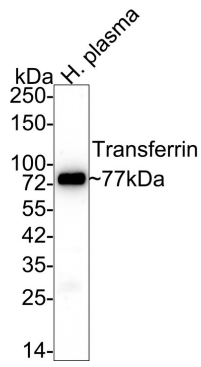

Fig1: Western blot analysis of Transferrin on human plasma with Mouse anti-Transferrin antibody (M1510-17) at 1/1,000 dilution.

Lysates/proteins at 20 µg/Lane.

Predicted band size: 77 kDa
Observed band size: 77 kDa

Exposure time: 2 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 (M1510-17) at 1/1,000 dilution was used in 5% NFDM/TBST at 4℃ overnight. Goat Anti-Mouse IgG - HRP Secondary Antibody (HA1006) at 1/50,000 dilution was used for 1 hour at room temperature.

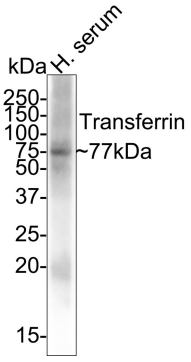

Fig2: Western blot analysis of Transferrin on human serum with Mouse anti-Transferrin antibody (M1510-17) at 1/1,000 dilution.

Lysates/proteins at 10 µg/Lane.

Predicted band size: 77 kDa
Observed band size: 77 kDa

Exposure time: 24 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 (M1510-17) at 1/1,000 dilution was used in 5% NFDM/TBST at 4℃ overnight. Goat Anti-Mouse IgG - HRP Secondary Antibody (HA1006) at 1/50,000 dilution was used for 1 hour at room temperature.

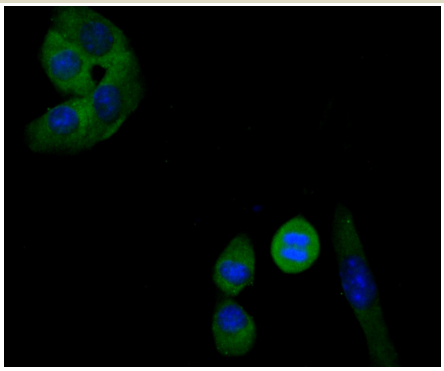

Fig3: ICC staining Transferrin in H22 cells (green). Formalin fixed cells were permeabilized with 0.1% Triton X-100 in TBS for 10 minutes at room temperature and blocked with 1% Blocker BSA for 15 minutes at room temperature. Cells were probed with Transferrin monoclonal antibody at a dilution of 1:50 for 1 hour at room temperature, washed with PBS. Alexa Fluorc™ 488 Goat anti-Mouse IgG was used as the secondary antibody at 1/100 dilution. The nuclear counter stain is DAPI (blue).

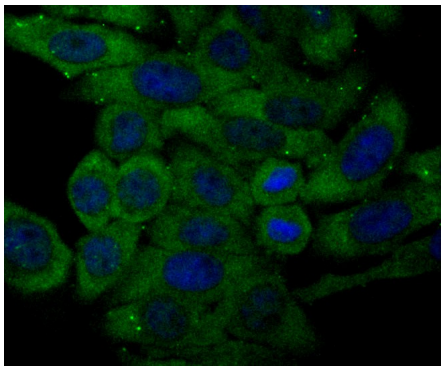

Fig4: ICC staining Transferrin in HepG2 cells (green). Formalin fixed cells were permeabilized with 0.1% Triton X-100 in TBS for 10 minutes at room temperature and blocked with 1% Blocker BSA for 15 minutes at room temperature. Cells were probed with Transferrin monoclonal antibody at a dilution of 1:50 for 1 hour at room temperature, washed with PBS. Alexa Fluorc™ 488 Goat anti-Mouse IgG was used as the secondary antibody at 1/100 dilution. The nuclear counter stain is DAPI (blue).

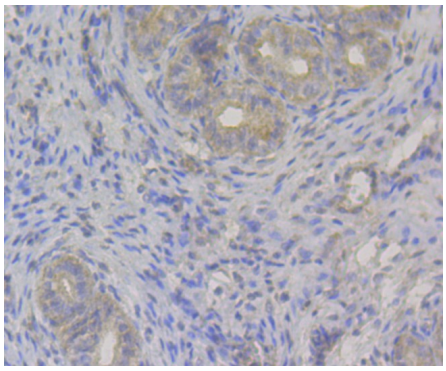

Fig5: Immunohistochemical analysis of paraffin-embedded rat uterus tissue using anti-Transferrin antibody. The section was pre-treated using heat mediated antigen retrieval with sodium citrate buffer (pH 6.0) for 20 minutes. The tissues were blocked in 5% BSA for 30 minutes at room temperature, washed with ddH_2O and PBS, and then probed with the antibody (M1510-17) at 1/200 dilution, for 30 minutes at room temperature and detected using an HRP conjugated compact polymer system. DAB was used as the chrogen. Counter stained with hematoxylin and mounted with DPX.

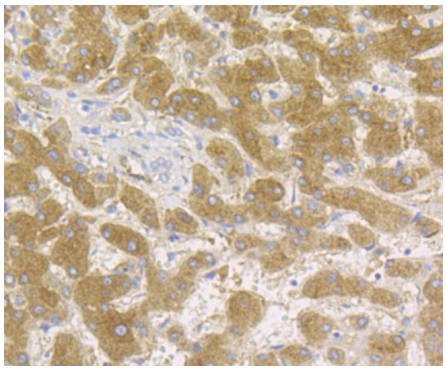

Fig6: Immunohistochemical analysis of paraffin-embedded human liver tissue using anti-Transferrin antibody. The section was pre-treated using heat mediated antigen retrieval with sodium citrate buffer (pH 6.0) for 20 minutes. The tissues were blocked in 5% BSA for 30 minutes at room temperature, washed with ddH_2O and PBS, and then probed with the antibody (M1510-17) at 1/200 dilution, for 30 minutes at room temperature and detected using an HRP conjugated compact polymer system. DAB was used as the chrogen. Counter stained with hematoxylin and mounted with DPX.

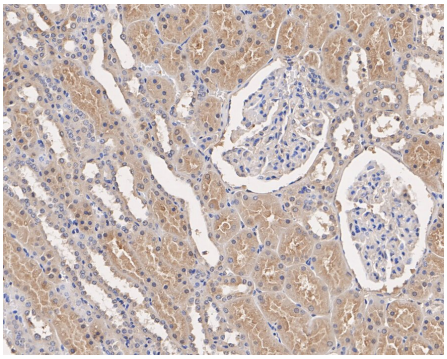

Fig7: Immunohistochemical analysis of paraffin-embedded human kidney tissue with Mouse anti-Transferrin antibody (M1510-17) at 1/1,000 dilution.

The section was pre-treated using heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0) for 20 minutes. The tissues were blocked in 1% BSA for 20 minutes at room temperature, washed with ddH_2O and PBS, and then probed with the primary antibody (M1510-17) at 1/1,000 dilution for 1 hour at room temperature. The detection was performed using an HRP conjugated compact polymer system. DAB was used as the chromogen. Tissues were counterstained with hematoxylin and mounted with DPX.

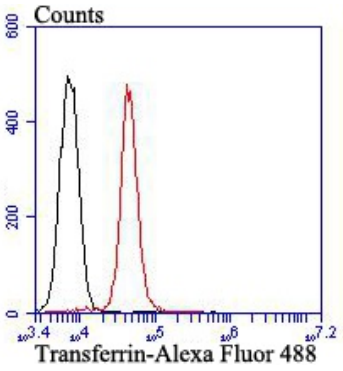

Fig8: Flow cytometric analysis of Transferrin was done on HepG2 cells. The cells were fixed, permeabilized and stained with Transferrin antibody at 1/100 dilution (red) compared with an unlabelled control (cells without incubation with primary antibody; black). After incubation of the primary antibody on room temperature for an hour, the cells was stained with a Alexa Fluor™ 488-conjugated goat anti-mouse IgG Secondary antibody at 1/500 dilution for 30 minutes.

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

Background References

1. Knisely A S et al. Molecular characterization of a third case of human atransferrinemia. Blood 104:2607-2607 (2004).
2. McGillivray R.T.A et al. The primary structure of human serum transferrin. The structures of seven cyanogen bromide fragments and the assembly of the complete structure. J Biol Chem 258:3543-3553 (1983).