Anti-TIMP3 Antibody [PSH04-41] - BSA and Azide free

HA750950

Product Type:	Recombinant Rabbit monoclonal IgG, primary antibodies
Species reactivity:	Human, Rat
Applications:	WB, IF-Cell
Molecular Wt:	Predicted band size: 24 kDa
Clone number:	PSH04-41

Description: Metalloproteinase inhibitor 3 is a protein that in humans is encoded by the TIMP3 gene. This gene belongs to the tissue inhibitor of metalloproteinases gene family. The proteins encoded by this gene family are inhibitors of the matrix metalloproteinases, a group of peptidases involved in degradation of the extracellular matrix (ECM). Expression of this gene is induced in response to mitogenic stimulation and this netrin domain-containing protein is localized to the ECM. Mutations in this gene have been associated with the autosomal dominant disorder Sorsby's fundus dystrophy.

Immunogen: Recombinant protein within human TIMP3 aa 1-211 / 211.

Positive control: HepG2 cell lysate, A431 cell lysate, rat placenta tissue lysate, rat spleen tissue lysate, HeLa, HepG2.

Subcellular location: Secreted, extracellular space, extracellular matrix.

Database links: SwissProt: P35625 Human | P48032 Rat

Recommended Dilutions:

WB	1:1,000
IF-Cell	1:100

Storage Buffer: PBS (pH7.4).

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

Purity: Protein A affinity purified.

Images

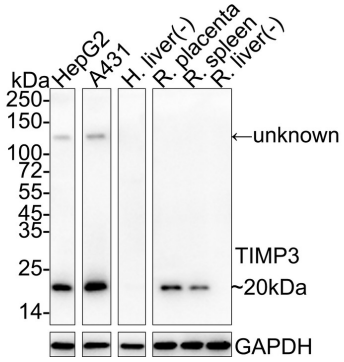

Fig1: Western blot analysis of TIMP3 on different lysates with Rabbit anti-TIMP3 antibody (HA750950) at 1/1,000 dilution.

Lane 1: HepG2 cell lysate
Lane 2: A431 cell lysate
Lane 3: Human liver tissue lysate (negative)
Lane 4: Rat placenta tissue lysate
Lane 5: Rat spleen tissue lysate
Lane 6: Rat liver tissue lysate (negative)

Lysates/proteins at 20 µg/Lane.

Predicted band size: 24 kDa
Observed band size: 20 kDa

Exposure time: 46 seconds; ECL: K1801;

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 (HA750950) at 1/1,000 dilution was used in 5% NFDM/TBST at 4℃ overnight. Goat Anti-Rabbit IgG - HRP Secondary Antibody (HA1001) at 1/50,000 dilution was used for 1 hour at room temperature.

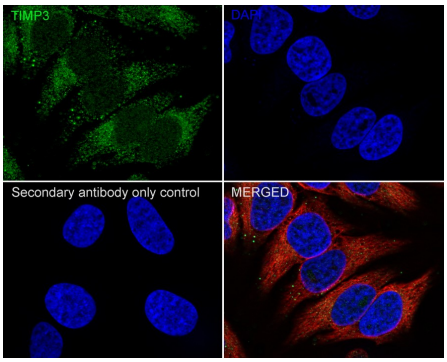

Fig2: Immunocytochemistry analysis of HeLa cells labeling TIMP3 with Rabbit anti-TIMP3 antibody (HA750950) at 1/100 dilution.

Cells were fixed in 4% paraformaldehyde for 20 minutes at room temperature, permeabilized with 0.1% Triton X-100 in PBS for 5 minutes at room temperature, then blocked with 1% BSA in 10% negative goat serum for 1 hour at room temperature. Cells were then incubated with Rabbit anti-TIMP3 antibody (HA750950) at 1/100 dilution in 1% BSA in PBST overnight at 4 ℃. Goat Anti-Rabbit IgG H&L (iFluor™ 488, HA1121) was used as the secondary antibody at 1/1,000 dilution. PBS instead of the primary antibody was used as the secondary antibody only control. Nuclear DNA was labelled in blue with DAPI.

Beta tubulin (M1305-2, red) was stained at 1/100 dilution overnight at +4℃. Goat Anti-Mouse IgG H&L (iFluor™ 594, HA1126) was used as the secondary antibody at 1/1,000 dilution.

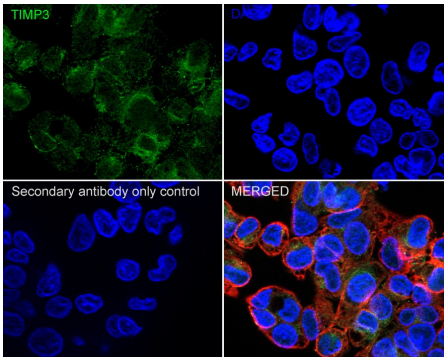

Fig3: Immunocytochemistry analysis of HepG2 cells labeling TIMP3 with Rabbit anti-TIMP3 antibody (HA750950) at 1/100 dilution.

Cells were fixed in 4% paraformaldehyde for 20 minutes at room temperature, permeabilized with 0.1% Triton X-100 in PBS for 5 minutes at room temperature, then blocked with 1% BSA in 10% negative goat serum for 1 hour at room temperature. Cells were then incubated with Rabbit anti-TIMP3 antibody (HA750950) at 1/100 dilution in 1% BSA in PBST overnight at 4 ℃. Goat Anti-Rabbit IgG H&L (iFluor™ 488, HA1121) was used as the secondary antibody at 1/1,000 dilution. PBS instead of the primary antibody was used as the secondary antibody only control. Nuclear DNA was labelled in blue with DAPI.

Beta tubulin (M1305-2, red) was stained at 1/100 dilution overnight at +4℃. Goat Anti-Mouse IgG H&L (iFluor™ 594, HA1126) was used as the secondary antibody at 1/1,000 dilution.

Background References

1. Casagrande V et al. TIMP3 involvement and potentiality in the diagnosis, prognosis and treatment of diabetic nephropathy. Acta Diabetol. 2021 Dec
2. Guan B et al. Early-Onset TIMP3-Related Retinopathy Associated With Impaired Signal Peptide. JAMA Ophthalmol. 2022 Jul