

Anti-TXNIP Antibody [JM60-35]

ET1705-72



Product Type:	Recombinant Rabbit monoclonal IgG, primary antibodies
Species reactivity:	Human, Mouse, Rat
Applications:	WB, IF-Cell, IF-Tissue, IHC-P, FC
Molecular Wt:	Predicted band size: 44 kDa
Clone number:	JM60-35

Description: May act as an oxidative stress mediator by inhibiting thioredoxin activity or by limiting its bioavailability. Interacts with COPS5 and restores COPS5-induced suppression of CDKN1B stability, blocking the COPS5-mediated translocation of CDKN1B from the nucleus to the cytoplasm. Functions as a transcriptional repressor, possibly by acting as a bridge molecule between transcription factors and corepressor complexes, and over-expression will induce G0/G1 cell cycle arrest. Required for the maturation of natural killer cells.

Immunogen: Synthetic peptide within Human TXNIP aa 50-99 / 391.

Positive control: HeLa cell lysate, NIH/3T3 cell lysate, PC-12 cell lysate, mouse stomach tissue lysate, mouse kidney tissue lysate, PC-12, human kidney tissue, mouse kidney tissue, rat kidney tissue, human stomach tissue, mouse esophagus tissue, mouse stomach tissue.

Subcellular location: Cytoplasm.

Database links: SwissProt: Q9H3M7 Human | Q8BG60 Mouse | Q5M7W1 Rat

Recommended Dilutions:

WB	1:1,000
IF-Cell	1:100-1:200
IF-Tissue	1:500-1:1,000
IHC-P	1:500-1:5,000
FC	1:1,000

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

Storage Instruction: Shipped at 4°C. Store at +4°C short term (1-2 weeks). It is recommended to aliquot into single-use upon delivery. Store at -20°C long term.

Purity: Protein A affinity purified.

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Orders:0086-571-88062880

Technical:0086-571-89986345

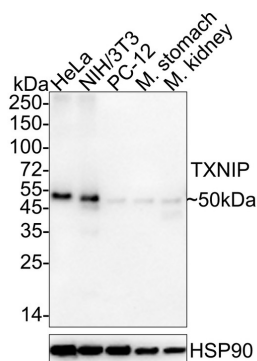
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Images

Fig1: Western blot analysis of TXNIP on different lysates with Rabbit anti-TXNIP antibody (ET1705-72) at 1/1,000 dilution.

Lane 1: HeLa cell lysate
 Lane 2: NIH/3T3 cell lysate
 Lane 3: PC-12 cell lysate
 Lane 4: Mouse stomach tissue lysate
 Lane 5: Mouse kidney tissue lysate



Lysates/proteins at 20 µg/Lane.

Predicted band size: 44 kDa
 Observed band size: 50 kDa

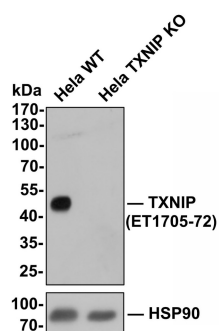
Exposure time: 3 minutes; ECL: K1801;

4-20% SDS-PAGE gel.

Proteins were transferred to a PVDF membrane and blocked with 5% NFD/MTBST for 1 hour at room temperature. The primary antibody (ET1705-72) at 1/1,000 dilution was used in 5% NFD/MTBST 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 TXNIP with anti-TXNIP antibody (ET1705-72) at 1/1,000 dilution.

Lane 1: Wild-type HeLa whole cell lysate (10 µg).
 Lane 2: TXNIP knockout HeLa whole cell lysate (10 µg).



Proteins were transferred to a PVDF membrane and blocked with 5% NFD/MTBST for 1 hour at room temperature. The primary antibody (ET1705-72, 1/1,000) was used in 5% BSA 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.

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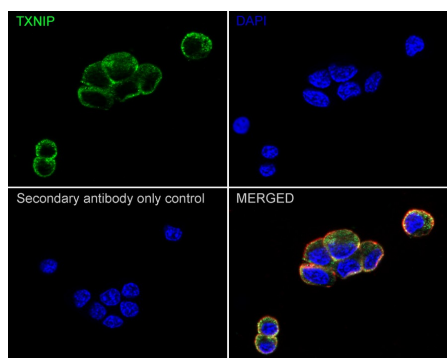
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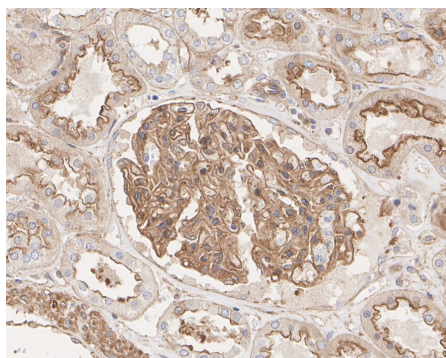
Fig3: Immunocytochemistry analysis of PC-12 cells labeling TXNIP with Rabbit anti-TXNIP antibody (ET1705-72) at 1/100 dilution.



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-TXNIP antibody (ET1705-72) at 1/100 dilution in 1% BSA in PBST overnight at 4 °C. 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.

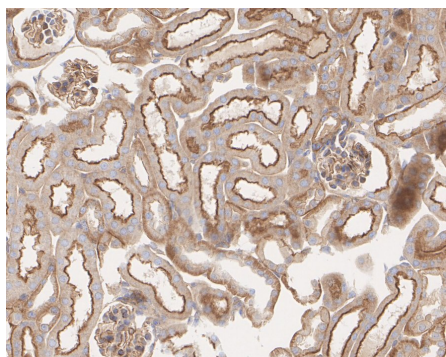
Beta tubulin (M1305-2, red) was stained at 1/100 dilution overnight at +4°C. Goat Anti-Mouse IgG H&L (iFluor™ 594, HA1126) was used as the secondary antibody at 1/1,000 dilution.

Fig4: Immunohistochemical analysis of paraffin-embedded human kidney tissue with Rabbit anti-TXNIP antibody (ET1705-72) at 1/5,000 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 ddH₂O and PBS, and then probed with the primary antibody (ET1705-72) at 1/5,000 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.

Fig5: Immunohistochemical analysis of paraffin-embedded mouse kidney tissue with Rabbit anti-TXNIP antibody (ET1705-72) at 1/5,000 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 ddH₂O and PBS, and then probed with the primary antibody (ET1705-72) at 1/5,000 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.

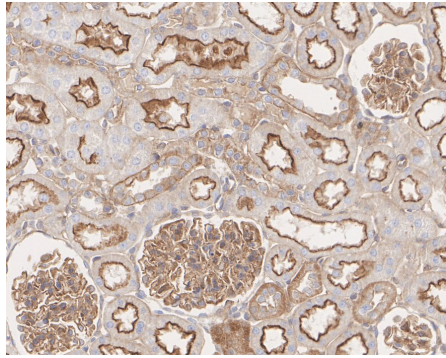


Fig6: Immunohistochemical analysis of paraffin-embedded rat kidney tissue with Rabbit anti-TXNIP antibody (ET1705-72) at 1/5,000 dilution.

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 ddH₂O and PBS, and then probed with the primary antibody (ET1705-72) at 1/5,000 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.

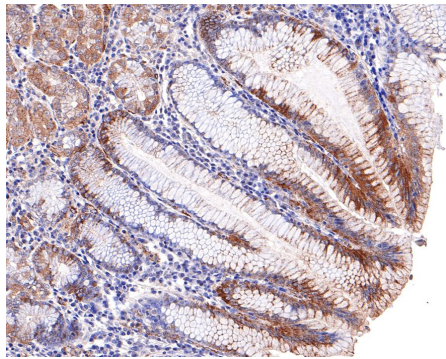


Fig7: Immunohistochemical analysis of paraffin-embedded human stomach tissue with Rabbit anti-TXNIP antibody (ET1705-72) at 1/400 dilution.

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 ddH₂O and PBS, and then probed with the primary antibody (ET1705-72) at 1/400 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.

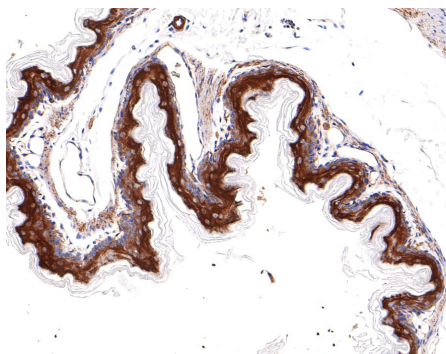


Fig8: Immunohistochemical analysis of paraffin-embedded mouse esophagus tissue with Rabbit anti-TXNIP antibody (ET1705-72) at 1/400 dilution.

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 ddH₂O and PBS, and then probed with the primary antibody (ET1705-72) at 1/400 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.

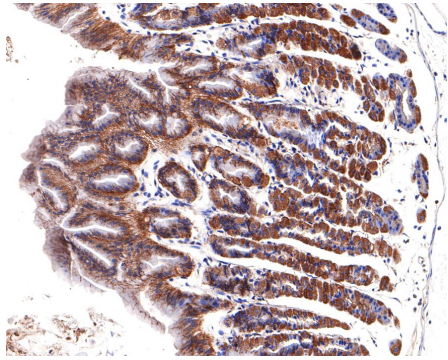


Fig9: Immunohistochemical analysis of paraffin-embedded mouse stomach tissue with Rabbit anti-TXNIP antibody (ET1705-72) at 1/400 dilution.

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 ddH₂O and PBS, and then probed with the primary antibody (ET1705-72) at 1/400 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.

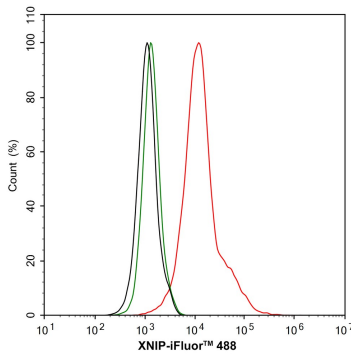


Fig10: Flow cytometric analysis of PC-12 cells labeling TXNIP.

Cells were fixed and permeabilized. Then stained with the primary antibody (ET1705-72, 1/1,000) (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. Liu Y et al. TXNIP mediates NLRP3 inflammasome activation in cardiac microvascular endothelial cells as a novel mechanism in myocardial ischemia/reperfusion injury. *Basic Res Cardiol* 109:415 (2014).
2. Yalon, M. et al. Overcoming Resistance of Cancer Cells to PARP-1 Inhibitors with Three Different Drug Combinations. *PLoS ONE*. 11: e0155711 (2016).

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