Anti-GRIM19 Antibody [JG82-33]

ET7108-66

Product Type:	Recombinant Rabbit monoclonal IgG, primary antibodies
Species reactivity:	Human
Applications:	WB, IHC-P, IF-Cell
Molecular Wt:	Predicted band size: 17 kDa
Clone number:	JG82-33

Description: The GRIM family of proteins appear to be novel types of tumor suppressors. Grim19, which stands for gene associated with retinoic-interferon-induced mortality 19 protein, is also designated cell death-regulatory protein Grim-19 or NADH dehydrogenase ubiquinone 1 alpha subcomplex subunit 13. The Grim19 protein plays two roles within the cell. As a member of the interferon-beta and retinoic acid-induced pathway of cell death, Grim19 induces apoptosis. As part of the mitochondrial complex I, Grim19 is essential for its assembly and electron transfer activity. It transfers electrons to the respiratory chain from NADH and plays a role in the interferon/all-trans-retinoic acid (IFN/RA) cell death pathway. It localizes primarily to the mitochondrion, but may translocate to the nucleus upon IFN/RA treatment. Grim19 may also be useful as a biological marker or target for drug development.

Immunogen: Recombinant protein within Human GRIM19 aa 1-144 / 144.

Positive control: HeLa cell lysate, Ramos cell lysate, 293T cell lysate, Jurkat cell lysate, MCF7 cell lysate, human kidney tissue, human liver tissue, human prostate cancer tissue, HepG2.

Subcellular location: Mitochondrion. Nucleus.

Database links: SwissProt: Q9P0J0 Human

Recommended Dilutions:

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

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

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

Purity: Protein A affinity purified.

Images

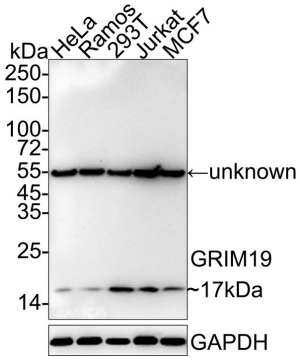

Fig1: Western blot analysis of GRIM19 on different lysates with Rabbit anti-GRIM19 antibody (ET7108-66) at 1/1,000 dilution.

Lane 1: HeLa cell lysate
Lane 2: Ramos cell lysate
Lane 3: 293T cell lysate
Lane 4: Jurkat cell lysate
Lane 5: MCF7 cell lysate

Lysates/proteins at 20 µg/Lane.

Predicted band size: 17 kDa
Observed band size: 17 kDa

Exposure time: 3 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 (ET7108-66) 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.

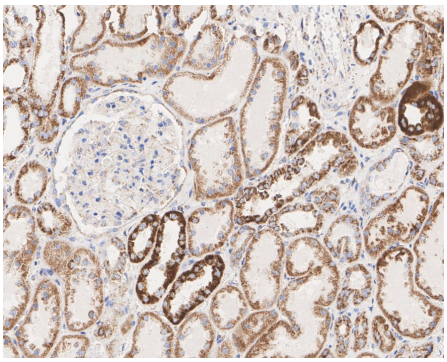

Fig2: Immunohistochemical analysis of paraffin-embedded human kidney tissue with Rabbit anti-GRIM19 antibody (ET7108-66) at 1/1,000 dilution.

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 (ET7108-66) 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.

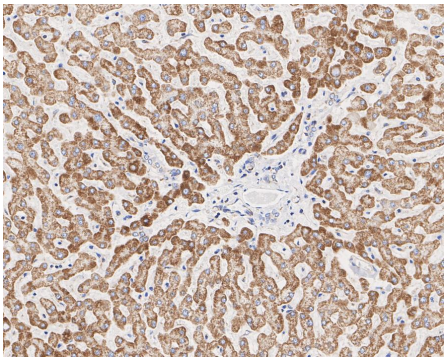

Fig3: Immunohistochemical analysis of paraffin-embedded human liver tissue with Rabbit anti-GRIM19 antibody (ET7108-66) at 1/1,000 dilution.

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 (ET7108-66) 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.

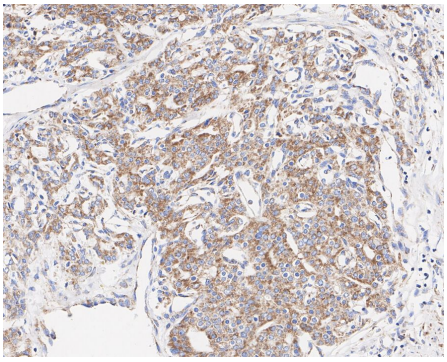

Fig4: Immunohistochemical analysis of paraffin-embedded human prostate cancer tissue with Rabbit anti-GRIM19 antibody (ET7108-66) at 1/1,000 dilution.

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 (ET7108-66) 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.

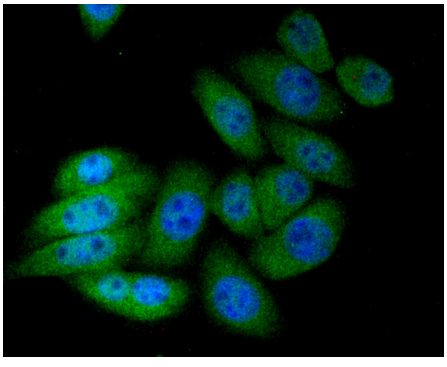

Fig5: Immunocytochemistry analysis of HepG2 cells labeling GRIM19 with Rabbit anti-GRIM19 antibody (ET7108-66) at 1/50 dilution.

Cells were fixed in 4% paraformaldehyde for 10 minutes at 37 ℃, permeabilized with 0.05% Triton X-100 in PBS for 20 minutes, and then blocked with 2% negative goat serum for 30 minutes at room temperature. Cells were then incubated with Rabbit anti-GRIM19 antibody (ET7108-66) at 1/50 dilution in 2% negative goat serum overnight at 4 ℃. Alexa Fluor®488 conjugate-Goat anti-Rabbit IgG was used as the secondary antibody at 1/1,000 dilution. Nuclear DNA was labelled in blue with DAPI.

Background References

1. Lufei C et al. GRIM-19, a death-regulatory gene product, suppresses Stat3 activity via functional interaction. EMBO J 22:1325-1335 (2003).
2. Zhang J et al. The cell death regulator GRIM-19 is an inhibitor of signal transducer and activator of transcription 3. Proc Natl Acad Sci USA 100:9342-9347 (2003).