

Anti-GM130 Antibody [JE42-53] - BSA and Azide free

HA751992



Product Type:	Recombinant Rabbit monoclonal IgG, primary antibodies
Species reactivity:	Human, Mouse
Applications:	WB, IHC-P, IF-Cell, IHC-Fr, IF-Tissue
Molecular Wt:	Predicted band size: 113 kDa
Clone number:	JE42-53

Description: Peripheral membrane component of the cis-Golgi stack that acts as a membrane skeleton that maintains the structure of the Golgi apparatus, and as a vesicle tether that facilitates vesicle fusion to the Golgi membrane. Together with p115/USO1 and STX5, involved in vesicle tethering and fusion at the cis-Golgi membrane to maintain the stacked and inter-connected structure of the Golgi apparatus. Plays a central role in mitotic Golgi disassembly. Also plays a key role in spindle pole assembly and centrosome organization. Promotes the mitotic spindle pole assembly by activating the spindle assembly factor TPX2 to nucleate microtubules around the Golgi and capture them to couple mitotic membranes to the spindle. TPX2 then activates AURKA kinase and stimulates local microtubule nucleation. Upon filament assembly, nascent microtubules are further captured by GOLGA2, thus linking Golgi membranes to the spindle. Regulates the meiotic spindle pole assembly, probably via the same mechanism. Also regulates the centrosome organization. Also required for the Golgi ribbon formation and glycosylation of membrane and secretory proteins.

Immunogen: Recombinant protein within human GM130 aa 1-100 (N terminal).

Positive control: HeLa cell lysate, MCF7 cell lysate, A549 cell lysate, human kidney tissue, mouse kidney tissue, MCF7, B16-F1.

Subcellular location: Cytoplasm, Cytoskeleton, Membrane, Microtubule.

Database links: SwissProt: Q08379 Human | Q921M4 Mouse

Recommended Dilutions:

WB	1:1,000
IHC-P	1:1,000
IF-Cell	1:3,000-1:5,000
IHC-Fr	1:1,000
IF-Tissue	1:1,000

Storage Buffer: PBS (pH7.4).

Storage Instruction: Store at 2-8°C. Avoid freeze.

Purity: Protein A affinity purified.

Hangzhou Huaan Biotechnology Co., Ltd.

Orders:0086-571-88062880

Technical:0086-571-89986345

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Applications:WB=Western blot IHC-P=Immunohistochemistry (paraffin) IF-Cell=Immunofluorescence (Cell) IF-Tissue=Immunofluorescence (Tissue) FC=Flow cytometry IP=Immunoprecipitation

Images

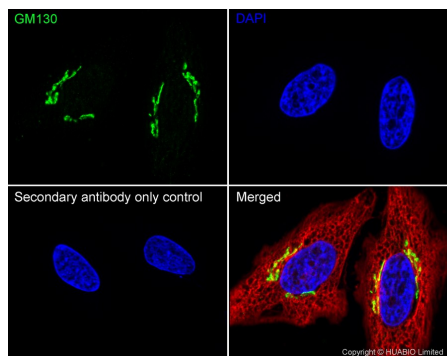


Fig1: This data was developed using HA721282, the same antibody clone in a different buffer formulation.

Immunocytochemistry analysis of HeLa cells labeling GM130 with Rabbit anti-GM130 antibody (HA721282) at 1/5,000 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-GM130 antibody (HA721282) at 1/5,000 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.

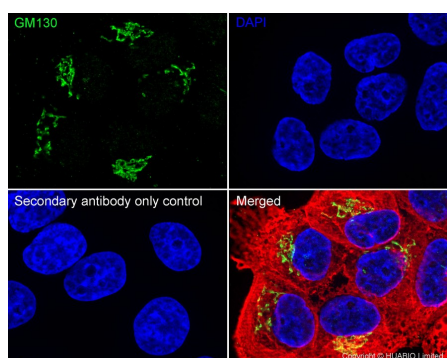


Fig2: This data was developed using HA721282, the same antibody clone in a different buffer formulation.

Immunocytochemistry analysis of MCF7 cells labeling GM130 with Rabbit anti-GM130 antibody (HA721282) at 1/5,000 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-GM130 antibody (HA721282) at 1/5,000 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.

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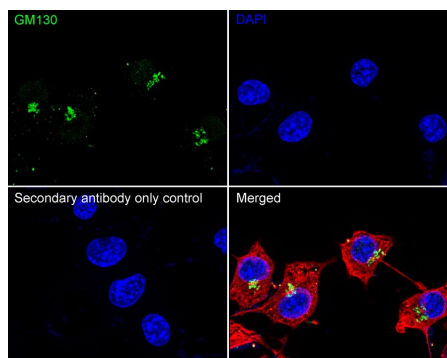
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Fig3: This data was developed using HA721282, the same antibody clone in a different buffer formulation.

Immunocytochemistry analysis of B16-F1 cells labeling GM130 with Rabbit anti-GM130 antibody (HA721282) at 1/3,000 dilution.

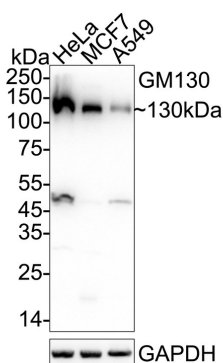


Cells were fixed in 4% paraformaldehyde for 15 minutes at room temperature, permeabilized with 0.1% Triton X-100 in PBS for 15 minutes at room temperature, then blocked with 1% BSA in 10% negative goat serum for 1 hour at room temperature. Cells were then incubated with Rabbit anti-GM130 antibody (HA721282) at 1/3,000 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 (HA601187, 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: This data was developed using HA721282, the same antibody clone in a different buffer formulation.

Western blot analysis of GM130 on different lysates with Rabbit anti-GM130 antibody (HA721282) at 1/1,000 dilution.



Lane 1: HeLa cell lysate

Lane 2: MCF7 cell lysate

Lane 3: A549 cell lysate

Lysates/proteins at 20 µg/Lane.

Predicted band size: 113 kDa

Observed band size: 130 kDa

Exposure time: 14 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 (HA721282) at 1/1,000 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.

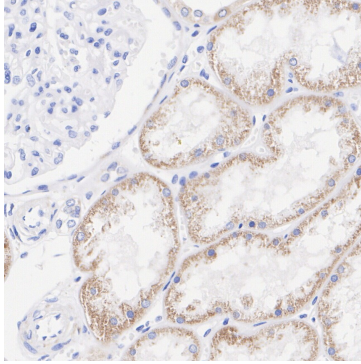


Fig5: This data was developed using HA721282, the same antibody clone in a different buffer formulation. Immunohistochemical analysis of paraffin-embedded human kidney tissue with Rabbit anti-GM130 antibody (HA721282) at 1/1,000 dilution.

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 ddH₂O and PBS, and then probed with the primary antibody (HA721282) 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.

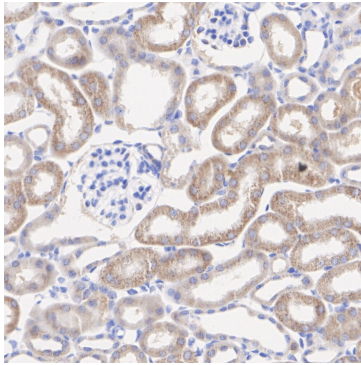


Fig6: This data was developed using HA721282, the same antibody clone in a different buffer formulation. Immunohistochemical analysis of paraffin-embedded mouse kidney tissue with Rabbit anti-GM130 antibody (HA721282) at 1/1,000 dilution.

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 ddH₂O and PBS, and then probed with the primary antibody (HA721282) 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.

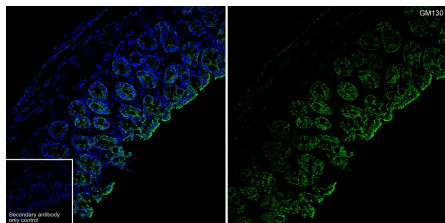


Fig7: This data was developed using HA721282, the same antibody clone in a different buffer formulation. Application: Immunofluorescence (IHC-Fr)

Species: Mouse
Tissue: Colon
Sample: Frozen section

Antigen retrieval: Not required

Wash buffer: 1× TBST
Blocking: 10% normal goat serum + 1% Triton X-100 + 0.3 M Glycine in TBST, 30 minutes at room temperature.

Primary antibody: HA721282, 1/1,000, overnight at 4°C.
Secondary antibody: Goat Anti-Rabbit IgG (iFluor™ 488, HA1121), 1.5 hours at room temperature.

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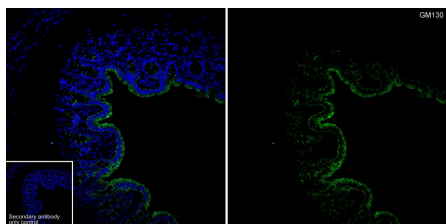


Fig8: This data was developed using HA721282, the same antibody clone in a different buffer formulation.

Application: Immunofluorescence (IF-tissue)

Species: Rat

Tissue: Colon

Sample: Paraffin-embedded section

Antigen retrieval: Heat-mediated, Tris-EDTA buffer (pH 9.0), 20 minutes at 95°C.

Wash buffer: 1× TBST

Blocking: 10% normal goat serum + 1% Triton X-100 + 0.3 M Glycine in TBST, 30 minutes at room temperature.

Primary antibody: HA721282, 1/1,000, overnight at 4°C.

Secondary antibody: Goat Anti-Rabbit IgG (iFluor™ 488, HA1121), 1.5 hours at room temperature.

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

Background References

1. Mei M et al. Generation of GM130 Conditional Knockout Mouse. *Methods Mol Biol.* 2023
2. Huang B et al. The Role of GM130 in Nervous System Diseases. *Front Neurol.* 2021 Oct

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