Anti-Rab11A Antibody [JE42-00]

HA721552

Product Type:	Recombinant Rabbit monoclonal IgG, primary antibodies
Species reactivity:	Human, Mouse, Rat
Applications:	WB, IHC-P, IF-Cell
Molecular Wt:	Predicted band size: 24 kDa
Clone number:	JE42-00

Description: Regulates endocytic recycling. May exert its functions by interacting with multiple effector proteins in different complexes. Acts as a major regulator of membrane delivery during cytokinesis. Together with MYO5B and RAB8A participates in epithelial cell polarization. Together with RAB3IP, RAB8A, the exocyst complex, PARD3, PRKCI, ANXA2, CDC42 and DNMBP promotes transcytosis of PODXL to the apical membrane initiation sites (AMIS), apical surface formation and lumenogenesis (By similarity). Together with MYO5B participates in CFTR trafficking to the plasma membrane and TF (Transferrin) recycling in nonpolarized cells. Required in a complex with MYO5B and RAB11FIP2 for the transport of NPC1L1 to the plasma membrane. Participates in the sorting and basolateral transport of CDH1 from the Golgi apparatus to the plasma membrane. Regulates the recycling of FCGRT (receptor of Fc region of monomeric Ig G) to basolateral membranes.

Immunogen: Recombinant protein within Human Rab11A aa 117-216 / 216.

Positive control: HeLa cell lysate, A549 cell lysate, SH-SY5Y cell lysate, Neuro-2a cell lysate, C6 cell lysate, Mouse testis tissue lysate, Rat testis tissue lysate, Rat brain tissue lysate, A549, Neuro-2a, human small intestine tissue.

Subcellular location: Cell membrane.

Database links: SwissProt: P62491 Human | P62492 Mouse | P62494 Rat

Recommended Dilutions:

WB	1:1,000-1:2,000
IHC-P	1:1,000
IF-Cell	1:100

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

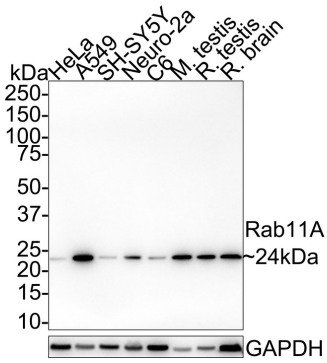

Fig1: Western blot analysis of Rab11A on different lysates with Rabbit anti-Rab11A antibody (HA721552) at 1/1,000 dilution.

Lane 1: HeLa cell lysate (20 µg/Lane)
Lane 2: A549 cell lysate (20 µg/Lane)
Lane 3: SH-SY5Y cell lysate (20 µg/Lane)
Lane 4: Neuro-2a cell lysate (20 µg/Lane)
Lane 5: C6 cell lysate (20 µg/Lane)
Lane 6: Mouse testis tissue lysate (40 µg/Lane)
Lane 7: Rat testis tissue lysate (40 µg/Lane)
Lane 8: Rat brain tissue lysate (40 µg/Lane)

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

Exposure time: 2 minutes 37 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 (HA721552) at 1/1,000 dilution was used in 5% NFDM/TBST at room temperature for 2 hours. Goat Anti-Rabbit IgG - HRP Secondary Antibody (HA1001) at 1:100,000 dilution was used for 1 hour at room temperature.

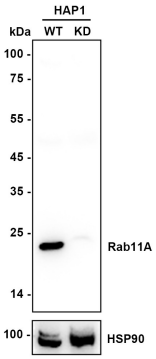

Fig2: Western blot analysis of Rab11A on different lysates with Rabbit anti-Rab11A antibody (HA721552) at 1/2,000 dilution.

Lane 1: HAP1-parental cell lysate
Lane 2: HAP1-Rab11A KD cell lysate

Lysates/proteins at 10 µg/Lane.

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

Exposure time: 12 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 (HA721552) at 1/2,000 dilution was used in K1803 at 4℃ overnight. Goat Anti-Rabbit IgG - HRP Secondary Antibody (HA1001) at 1/50,000 dilution was used for 1 hour at room temperature.

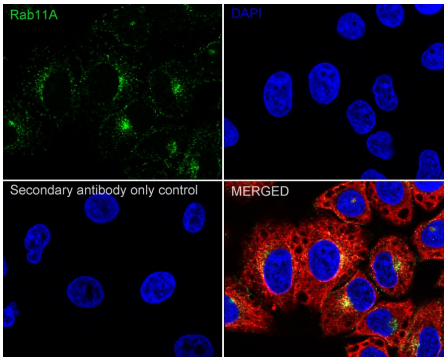

Fig3: Immunocytochemistry analysis of A549 cells labeling Rab11A with Rabbit anti-Rab11A antibody (HA721552) at 1/100 dilution.

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-Rab11A antibody (HA721552) 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 (HA601187, 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.

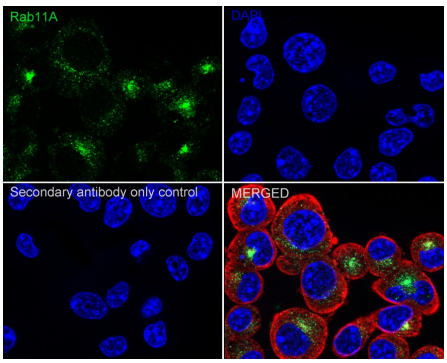

Fig4: Immunocytochemistry analysis of Neuro-2a cells labeling Rab11A with Rabbit anti-Rab11A antibody (HA721552) at 1/100 dilution.

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-Rab11A antibody (HA721552) 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 (HA601187, 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.

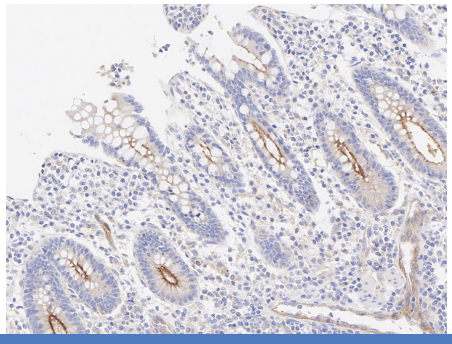

Fig5: Immunohistochemical analysis of paraffin-embedded human small intestine tissue with Rabbit anti-Rab11A antibody (HA721552) at 1/1,000 dilution.

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 (HA721552) at 1/1,000 dilution for 1 hour at room temperature. The detection was performed using an HRP conjugated compact

Background References

1. Bai S et al. Exocyst controls exosome biogenesis via Rab11a. Mol Ther Nucleic Acids. 2021 Dec
2. Wang Y et al. Rab11a promotes the malignant progression of ovarian cancer by inducing autophagy. Genes Genomics. 2022 Nov