Anti-ARF5 Antibody [JE53-83]

ET7110-46

Product Type:	Recombinant Rabbit monoclonal IgG, primary antibodies
Species reactivity:	Human, Mouse, Rat
Applications:	WB, IHC-P
Molecular Wt:	Predicted band size: 21 kDa
Clone number:	JE53-83

Description: The ADP-ribosylation factor (ARF) protein family are structurally and functionally conserved members of the Ras superfamily of regulatory GTP-binding proteins. ARFs influence vesicle trafficking and signal transduction in eukaryotic cells. ARF-dependent regulatory mechanisms include the coordination of spectrin interactions with golgi membranes and the association of actin to the golgi via rho family-dependent G-protein localization (Rac, CDC42) and WASP/Arp2/3 complexes. Additionally, ARFs play a central role in maintenance of organelle integrity, assembly of coat proteins, and activation of phospho-lipase D. The ARF proteins are categorized as class I (ARF1, ARF2, and ARF3), class II (ARF4 and ARF5) and class III (ARF6); members of each class share a common gene organization.

Immunogen: Recombinant protein within Human ARF5 aa 60-180 / 180.

Positive control: HeLa cell lysate, HepG2 cell lysate, A549 cell lysate, PC-12 cell lysate, mouse brain tissue lysate, human liver tissue, human breast carcinoma tissue, mouse lung tissue.

Subcellular location: Golgi apparatus, trans-Golgi network membrane, perinuclear region, membrane.

Database links: SwissProt: P84085 Human | P84084 Mouse | P84083 Rat

Recommended Dilutions:

WB	1:2,000
IHC-P	1:50-1:200

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

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

Purity: Protein A affinity purified.

Images

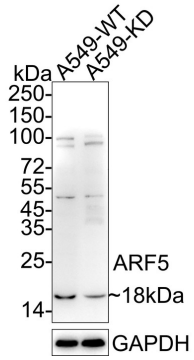

Fig1: Western blot analysis of ARF5 on different lysates with Rabbit anti-ARF5 antibody (ET7110-46) at 1/1,000 dilution.

Lane 1: A549-WT cell lysate
Lane 2: A549-KD ARF5 cell lysate

Lysates/proteins at 10 µg/Lane.

Predicted band size: 21 kDa
Observed band size: 18 kDa

Exposure time: 2 minutes 30 seconds; ECL: K1802;

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 (ET7110-46) at 1/1,000 dilution was used in 5% BSA at 4℃ overnight. Goat Anti-Rabbit IgG - HRP Secondary Antibody (HA1001) at 1/50,000 dilution was used for 1 hour at room temperature.

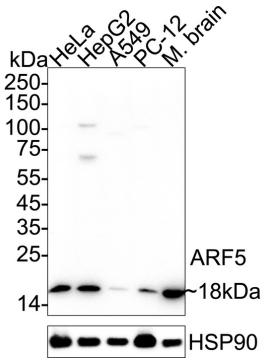

Fig2: Western blot analysis of ARF5 on different lysates with Rabbit anti-ARF5 antibody (ET7110-46) at 1/2,000 dilution.

Lane 1: HeLa cell lysate (20 µg/Lane)
Lane 2: HepG2 cell lysate (20 µg/Lane)
Lane 3: A549 cell lysate (20 µg/Lane)
Lane 4: PC-12 cell lysate (20 µg/Lane)
Lane 5: Mouse brain tissue lysate (40 µg/Lane)

Predicted band size: 21 kDa
Observed band size: 18 kDa

Exposure time: 3 minutes; 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 (ET7110-46) at 1/2,000 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.

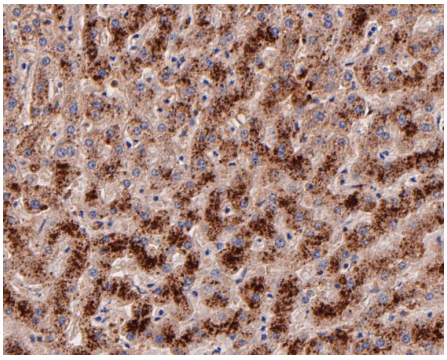

Fig3: Immunohistochemical analysis of paraffin-embedded human liver tissue using anti-ARF5 antibody. The section was pre-treated using heat mediated antigen retrieval with Tris-EDTA buffer (pH 8.0-8.4) for 20 minutes.The tissues were blocked in 5% BSA for 30 minutes at room temperature, washed with ddH_2O and PBS, and then probed with the primary antibody (ET7110-46, 1/50) for 30 minutes 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.

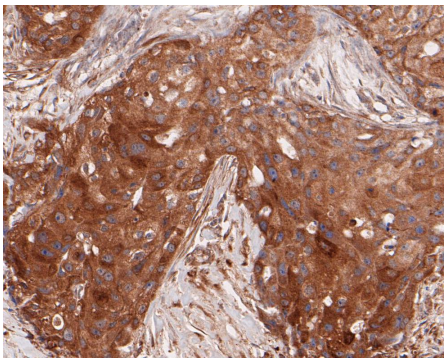

Fig4: Immunohistochemical analysis of paraffin-embedded human breast carcinoma tissue using anti-ARF5 antibody. The section was pre-treated using heat mediated antigen retrieval with Tris-EDTA buffer (pH 8.0-8.4) for 20 minutes.The tissues were blocked in 5% BSA for 30 minutes at room temperature, washed with ddH_2O and PBS, and then probed with the primary antibody (ET7110-46, 1/50) for 30 minutes 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.

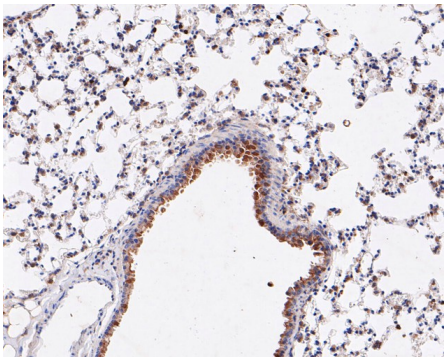

Fig5: Immunohistochemical analysis of paraffin-embedded mouse lung tissue using anti-ARF5 antibody. The section was pre-treated using heat mediated antigen retrieval with Tris-EDTA buffer (pH 8.0-8.4) for 20 minutes.The tissues were blocked in 5% BSA for 30 minutes at room temperature, washed with ddH_2O and PBS, and then probed with the primary antibody (ET7110-46, 1/50) for 30 minutes 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.

Background References

1. Liu Z. et. al. ARF2-ARF4 and ARF5 are Essential for Female and Male Gametophyte Development in Arabidopsis. Plant Cell Physiol. 2018 Jan 1;59(1):179-189.
2. Egerer J. et. al. GORAB Missense Mutations Disrupt RAB6 and ARF5 Binding and Golgi Targeting. J Invest Dermatol. 2015 Oct;135(10):2368-2376.