Anti-p16 ARC Antibody [SR34-02]

ET1602-9

Product Type:	Recombinant Rabbit monoclonal IgG, primary antibodies
Species reactivity:	Human, Mouse, Rat
Applications:	WB, IF-Cell, IF-Tissue, IHC-P, FC, IP
Molecular Wt:	Predicted band size: 16 kDa
Clone number:	SR34-02

Description: The Arp2/3 (Actin-related protein 2/3) complex consists of seven subunits, all of which are actin-related proteins. The complex is involved in the control of actin polymerization and in mediating the formation of branched actin networks. p16-ARC, also known as ARPC5 (Actin-related protein 2/3 complex subunit 5) or ARC16 (Arp2/3 complex 16 kDa subunit), is a 151 amino acid subunit of the Arp2/3 complex. Thought to play a role in maintaining the integrity of Arp2/3, p16-ARC is a substrate for MAPKAPK-2 which, through phosphorylation of p16-ARC, may participate in Arp2/3 regulatory functions and remodeling of the Actin cytoskeleton. Two isoforms of p16-ARC exist due to alternative splicing events.

Immunogen: Synthetic peptide within Human p16 ARC aa 1-50 / 151.

Positive control: HeLa cell lysate, MCF7 cell lysate, HepG2 cell lysate, human brain tissue lysate, mouse brain tissue lysate, rat brain tissue lysate, N2A, human spleen tissue, mouse lung tissue, mouse spleen tissue, human placenta tissue, SH-SY5Y.

Subcellular location: Cytoplasm, Cytoskeleton, Nucleus, Cell projection.

Database links: SwissProt: O15511 Human | Q9CPW4 Mouse | Q4KLF8 Rat

Recommended Dilutions:

WB	1:5,000
IF-Cell	1:50
IF-Tissue	1:50
IHC-P	1:50-1:200
FC	1:50-1:100
IP	Use at an assay dependent concentration.

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℃ or -80℃. Avoid repeated freeze / thaw cycles.

Purity: Protein A affinity purified.

Images

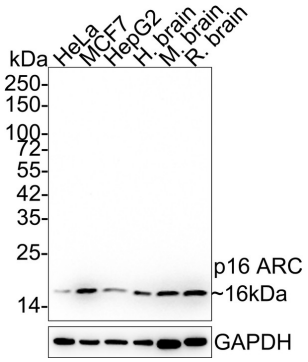

Fig1: Western blot analysis of p16 ARC on different lysates with Rabbit anti-p16 ARC antibody (ET1602-9) at 1/5,000 dilution.

Lane 1: HeLa cell lysate (15 µg/Lane)
Lane 2: MCF7 cell lysate (15 µg/Lane)
Lane 3: HepG2 cell lysate (15 µg/Lane)
Lane 4: Human brain tissue lysate (20 µg/Lane)
Lane 5: Mouse brain tissue lysate (20 µg/Lane)
Lane 6: Rat brain tissue lysate (20 µg/Lane)

Predicted band size: 16 kDa
Observed band size: 16 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 (ET1602-9) at 1/5,000 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.

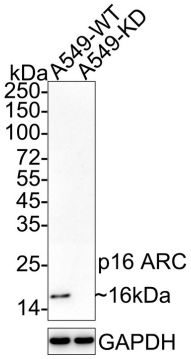

Fig2: Western blot analysis of p16 ARC on different lysates with Rabbit anti-p16 ARC antibody (ET1602-9) at 1/1,000 dilution.

Lane 1: A549-WT cell lysate
Lane 2: A549-KD p16 ARC cell lysate

Lysates/proteins at 10 µg/Lane.

Predicted band size: 16 kDa
Observed band size: 16 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 (ET1602-9) 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.

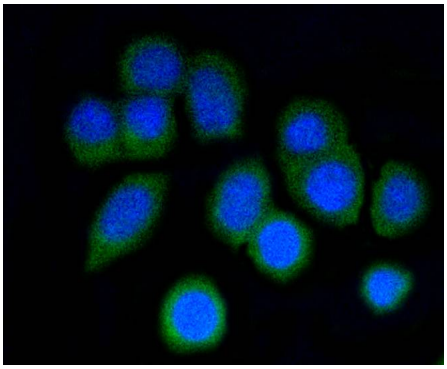

Fig3: ICC staining of p16 ARC in N2A cells (green). Formalin fixed cells were permeabilized with 0.1% Triton X-100 in TBS for 10 minutes at room temperature and blocked with 10% negative goat serum for 15 minutes at room temperature. Cells were probed with the primary antibody (ET1602-9, 1/50) for 1 hour at room temperature, washed with PBS. Alexa Fluor®488 conjugate-Goat anti-Rabbit IgG was used as the secondary antibody at 1/1,000 dilution. The nuclear counter stain is DAPI (blue).

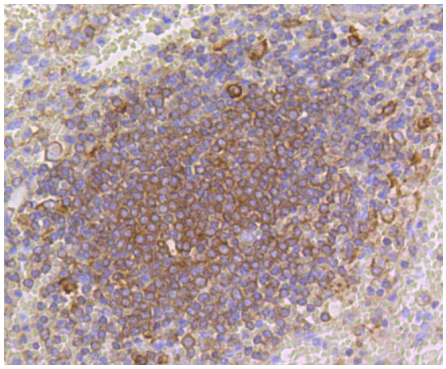

Fig4: Immunohistochemical analysis of paraffin-embedded human spleen tissue using anti-p16 ARC antibody. The section was pre-treated using heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0) for 20 minutes.The tissues were blocked in 1% BSA for 30 minutes at room temperature, washed with ddH_2O and PBS, and then probed with the primary antibody (ET1602-9, 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.

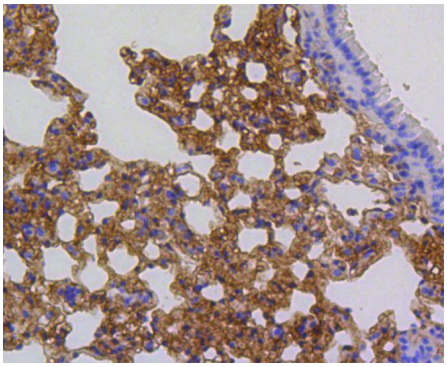

Fig5: Immunohistochemical analysis of paraffin-embedded mouse lung tissue using anti-p16 ARC antibody. The section was pre-treated using heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0) for 20 minutes.The tissues were blocked in 1% BSA for 30 minutes at room temperature, washed with ddH_2O and PBS, and then probed with the primary antibody (ET1602-9, 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.

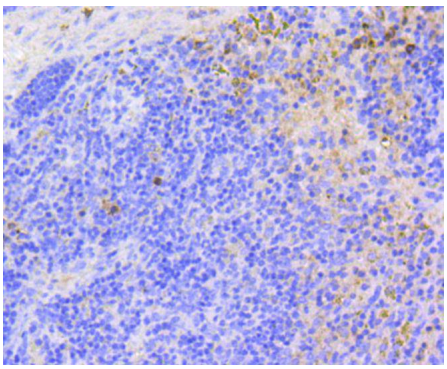

Fig6: Immunohistochemical analysis of paraffin-embedded mouse spleen tissue using anti-p16 ARC antibody. The section was pre-treated using heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0) for 20 minutes.The tissues were blocked in 1% BSA for 30 minutes at room temperature, washed with ddH_2O and PBS, and then probed with the primary antibody (ET1602-9, 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.

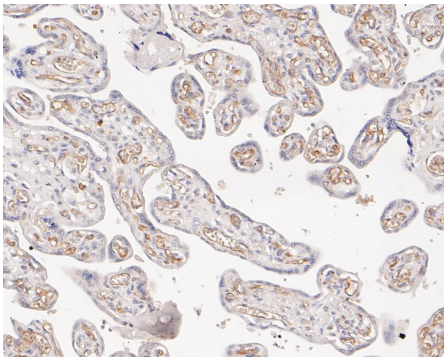

Fig7: Immunohistochemical analysis of paraffin-embedded human placenta tissue using anti-p16 ARC antibody. The section was pre-treated using heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0) for 20 minutes.The tissues were blocked in 1% BSA for 30 minutes at room temperature, washed with ddH_2O and PBS, and then probed with the primary antibody (ET1602-9, 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.

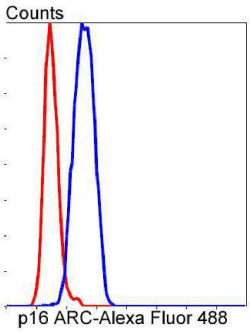

Fig8: Flow cytometric analysis of p16 ARC was done on SH-SY5Y cells. The cells were fixed, permeabilized and stained with the primary antibody (ET1602-9, 1/50) (blue). After incubation of the primary antibody at room temperature for an hour, the cells were stained with a Alexa Fluor®488 conjugate-Goat anti-Rabbit IgG Secondary antibody at 1/1000 dilution for 30 minutes.Unlabelled sample was used as a control (cells without incubation with primary antibody; red).

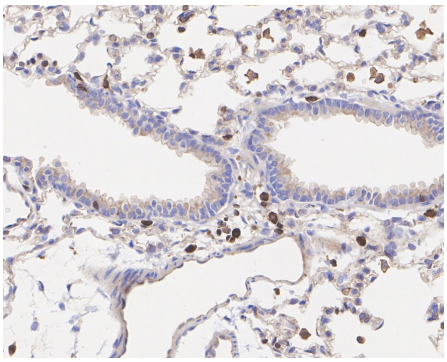

Fig9: Immunohistochemical analysis of paraffin-embedded rat lung tissue with Rabbit anti-p16 ARC antibody (ET1602-9) at 1/1,000 dilution.

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 (ET1602-9) 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.

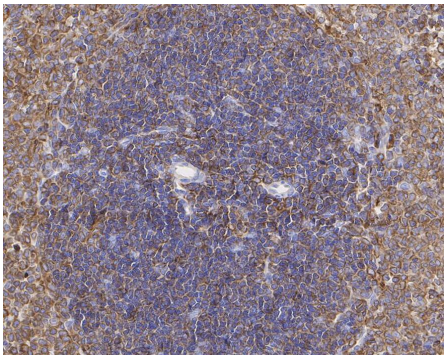

Fig10: Immunohistochemical analysis of paraffin-embedded rat spleen tissue with Rabbit anti-p16 ARC antibody (ET1602-9) at 1/1,000 dilution.

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 (ET1602-9) 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.

Background References

1. Vaca Jacome A.S., Rabilloud T., Schaeffer-Reiss C., et al. N-terminome analysis of the human mitochondrial proteome.. Proteomics 15:2519-2524(2015).
2. Bian Y., Song C., Cheng K., et al. An enzyme assisted RP-RPLC approach for in-depth analysis of human liver phosphoproteome.. J. Proteomics 96:253-262(2014).