

ARPC5 Antibody (Center)

Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP22234c

Specification

ARPC5 Antibody (Center) - Product Information

Application WB, IF,E Primary Accession O15511

Other Accession <u>O3SYX9</u>, <u>O9CPW4</u>, <u>O5R516</u>, <u>O4KLF8</u>

Reactivity Human, Mouse, Rat

Predicted Bovine
Host Rabbit
Clonality polyclonal
Isotype Rabbit IgG
Calculated MW 16320

ARPC5 Antibody (Center) - Additional Information

Gene ID 10092

Other Names

Actin-related protein 2/3 complex subunit 5, Arp2/3 complex 16 kDa subunit, p16-ARC, ARPC5, ARC16

Target/Specificity

This ARPC5 antibody is generated from a rabbit immunized with a KLH conjugated synthetic peptide between 67-101 amino acids from the Central region of human ARPC5.

Dilution

WB~~1:2000

IF~~1:25

E~~Use at an assay dependent concentration.

Format

Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.

Storage

Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

Precautions

ARPC5 Antibody (Center) is for research use only and not for use in diagnostic or therapeutic procedures.

ARPC5 Antibody (Center) - Protein Information

Name ARPC5





Synonyms ARC16

Function Component of the Arp2/3 complex, a multiprotein complex that mediates actin polymerization upon stimulation by nucleation-promoting factor (NPF) (PubMed:9230079). The Arp2/3 complex mediates the formation of branched actin networks in the cytoplasm, providing the force for cell motility (PubMed:9230079). In addition to its role in the cytoplasmic cytoskeleton, the Arp2/3 complex also promotes actin polymerization in the nucleus, thereby regulating gene transcription and repair of damaged DNA (PubMed:29925947). The Arp2/3 complex promotes homologous recombination (HR) repair in response to DNA damage by promoting nuclear actin polymerization, leading to drive motility of double-strand breaks (DSBs) (PubMed:29925947).

Cellular Location

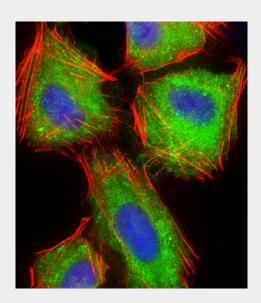
Cytoplasm, cytoskeleton. Cell projection. Nucleus

ARPC5 Antibody (Center) - Protocols

Provided below are standard protocols that you may find useful for product applications.

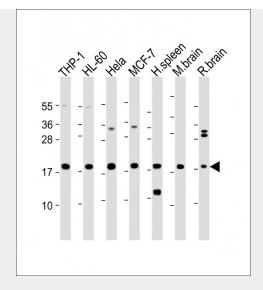
- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- <u>Immunoprecipitation</u>
- Flow Cytomety
- Cell Culture

ARPC5 Antibody (Center) - Images



Immunofluorescent analysis of 4% paraformaldehyde-fixed, 0.1% Triton X-100 permeabilized U-2 OS (human osteosarcoma cell line) cells labeling ARPC5 with AP22234c at 1/25 dilution, followed by Dylight® 488-conjugated goat anti-rabbit IgG (1583138) secondary antibody at 1/200 dilution (green). Immunofluorescence image showing cytoplasm and weak nucleus staining on U-2 OS cell line. Cytoplasmic actin is detected with Dylight® 554 Phalloidin (PD18466410) at 1/100 dilution (red). The nuclear counter stain is DAPI (blue).





All lanes: Anti-ARPC5 Antibody (Center) at 1:2000 dilution Lane 1: THP-1 whole cell lysate Lane 2: HL-60 whole cell lysate Lane 3: Hela whole cell lysate Lane 4: MCF-7 whole cell lysate Lane 5: Human spleen lysate Lane 6: Mouse brain lysate Lane 7: Rat brain lysate Lysates/proteins at 20 µg per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/10000 dilution. Predicted band size: 16 kDa Blocking/Dilution buffer: 5% NFDM/TBST.

ARPC5 Antibody (Center) - Background

Functions as component of the Arp2/3 complex which is involved in regulation of actin polymerization and together with an activating nucleation-promoting factor (NPF) mediates the formation of branched actin networks.

ARPC5 Antibody (Center) - References

Welch M.D., et al.J. Cell Biol. 138:375-384(1997).

Machesky L.M., et al. Biochem. J. 328:105-112(1997).

Gregory S.G., et al. Nature 441:315-321(2006).

Mural R.J., et al. Submitted (JUL-2005) to the EMBL/GenBank/DDBJ databases.

Gevaert K., et al. Nat. Biotechnol. 21:566-569(2003).