

**ARPC1B Antibody (Center)**  
**Affinity Purified Rabbit Polyclonal Antibody (Pab)**  
**Catalog # AP8754c****Specification**

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**ARPC1B Antibody (Center) - Product Information**

Application	WB, FC, IHC-P,E
Primary Accession	<a href="#">O15143</a>
Other Accession	<a href="#">O88656</a> , <a href="#">O9WV32</a> , <a href="#">Q58CQ2</a> , <a href="#">Q7ZXD5</a> , <a href="#">Q6GNU1</a>
Reactivity	Human
Predicted	Xenopus, Bovine, Mouse, Rat
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Antigen Region	159-188

**ARPC1B Antibody (Center) - Additional Information****Gene ID** 10095**Other Names**

Actin-related protein 2/3 complex subunit 1B, Arp2/3 complex 41 kDa subunit, p41-ARC, ARPC1B, ARC41

**Target/Specificity**

This ARPC1B antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 159-188 amino acids from the Central region of human ARPC1B.

**Dilution**WB~~1:1000  
FC~~1:10~50  
IHC-P~~1:50~100  
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**

ARPC1B Antibody (Center) is for research use only and not for use in diagnostic or therapeutic procedures.

**ARPC1B Antibody (Center) - Protein Information**

**Name** ARPC1B ([HGNC:704](#))

**Synonyms** ARC41

**Function** Component of the Arp2/3 complex, a multiprotein complex that mediates actin polymerization upon stimulation by nucleation-promoting factor (NPF) (PubMed:[11741539](#), PubMed:[9230079](#)). The Arp2/3 complex mediates the formation of branched actin networks in the cytoplasm, providing the force for cell motility (PubMed:[11741539](#), 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**

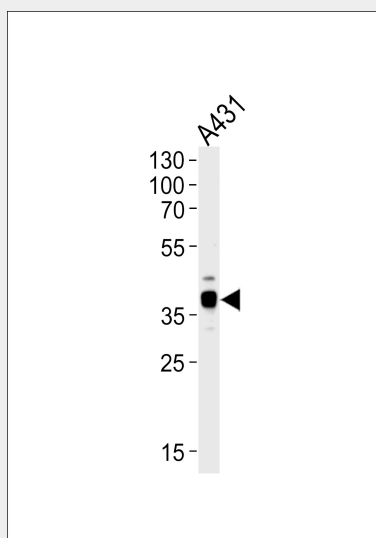
Cytoplasm, cytoskeleton. Nucleus

**ARPC1B Antibody (Center) - Protocols**

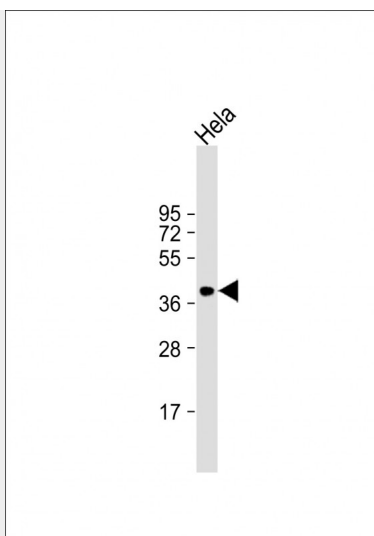
Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

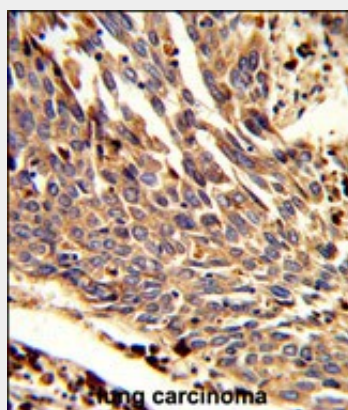
**ARPC1B Antibody (Center) - Images**



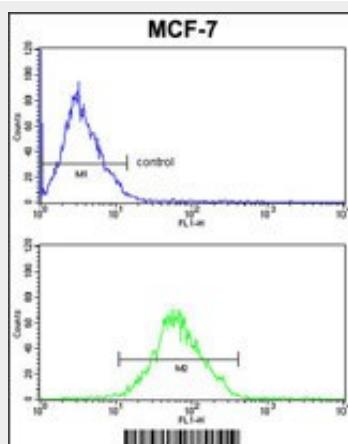
Western blot analysis of lysate from A431 cell line, using ARPC1B Antibody (Center)(Cat. #AP8754c). AP8754c was diluted at 1:1000 at each lane. A goat anti-rabbit IgG H&L(HRP) at 1:5000 dilution was used as the secondary antibody. Lysate at 35ug per lane.



Anti-ARPC1B Antibody (Center) at 1:1000 dilution + HeLa whole cell lysate Lysates/proteins at 20 µg per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/10000 dilution. Predicted band size : 41 kDa Blocking/Dilution buffer: 5% NFDM/TBST.



Formalin-fixed and paraffin-embedded human lung carcinoma reacted with ARPC1B Antibody (Center), which was peroxidase-conjugated to the secondary antibody, followed by DAB staining. This data demonstrates the use of this antibody for immunohistochemistry; clinical relevance has not been evaluated.



ARPC1B Antibody (Center) (Cat.#AP8754c) FC analysis of MCF-7 cells (bottom histogram) compared to a negative control cell (top histogram). FITC-conjugated goat-anti-rabbit secondary antibodies were used for the analysis.

**ARPC1B Antibody (Center) - Background**

ARPC1B is one of seven subunits of the human Arp2/3 protein complex. This subunit is a member of the SOP2 family of proteins and is most similar to the protein encoded by gene ARPC1A. The similarity between these two proteins suggests that they both may function as p41 subunit of the human Arp2/3 complex that has been implicated in the control of actin polymerization in cells. It is possible that the p41 subunit is involved in assembling and maintaining the structure of the Arp2/3 complex.

**ARPC1B Antibody (Center) - References**

Volkman, N., et.al., Science 293 (5539), 2456-2459 (2001)