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# ARPC5 Antibody (Center)

Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP22234c

## Product Information

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|---|---|
| **Application** | WB, IF, E |
| **Primary Accession** | O15511 |
| **Other Accession** | Q3SYX9, Q9CPW4, Q5R516, Q4KLF8 |
| **Reactivity** | Human, Mouse, Rat |
| **Predicted** | Bovine, Mouse, Rat |
| **Host** | Rabbit |
| **Clonality** | polyclonal |
| **Isotype** | Rabbit IgG |
| **Clone Names** | RB56751 |
| **Calculated MW** | 16320 |

## Additional Information

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| **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~~1:1000 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. |

## Protein Information

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| **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

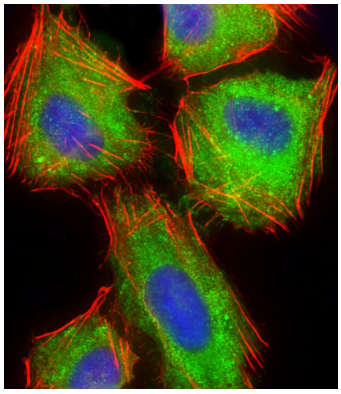
## Background

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.

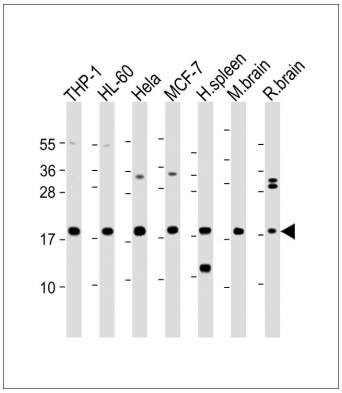
## References


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).


## 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.