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ARPC5 Antibody (Center)

Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP22234c

Product Information

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

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~~1:1000 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

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

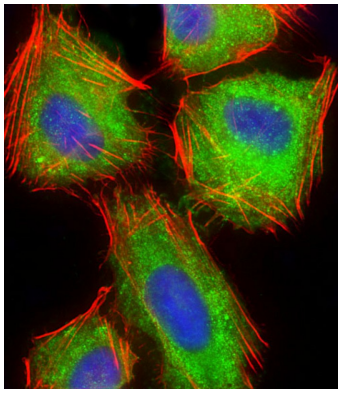
Background

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.

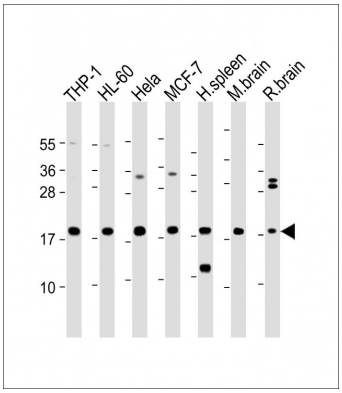
References

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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.

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.