

ARPC1B Rabbit pAb

Catalog # AP98999

Product Information

Application	WB, IHC-P, IHC-F, IF, E
Primary Accession	O15143
Other Accession	O15143
Predicted	Rat, Pig, Human, Mouse, Chicken, Goat, Sheep
Host	Rabbit
Clonality	Polyclonal
Calculated MW	40950
Physical State	Liquid
Immunogen	KLH conjugated synthetic peptide derived from human ARPC1B
Epitope Specificity	101-200/372
Isotype	IgG
Purity	affinity purified by Protein A
Buffer	0.01M TBS (pH7.4) with 1% BSA, 0.02% Proclin300 and 50% Glycerol.
SIMILARITY	Belongs to the WD repeat ARPC1 family. Contains 6 WD repeats.
SUBUNIT	Component of the Arp2/3 complex composed of ARP2, ARP3, ARPC1B/p41-ARC, ARPC2/p34-ARC, ARPC3/p21-ARC, ARPC4/p20-ARC and ARPC5/p16-ARC.
Important Note	This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.
Background Descriptions	This gene encodes 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. Multiple versions of the p41 subunit may adapt the functions of the complex to different cell types or developmental stages. This protein also has a role in centrosomal homeostasis by being an activator and substrate of the Aurora A kinase. [provided by RefSeq, Mar 2011]

Additional Information

Gene ID	10095
Other Names	ARC41; IMD71; PLTEID; p40-ARC; p41-ARC; 41kDa; L72; SOP2Hs; ARC1B_HUMAN; ARPC1B; Arp2/3 complex 41 kDa subunit; ARC1B_MOUSE; actin related protein 2/3 complex subunit 1B; actin related protein 2/3 complex, subunit 1B (41 kD); actin related protein 2/3 complex subunit 1B, 41kDa; ARP2/3 protein complex subunit p41; actin related protein 2/3 complex, subunit 1A (41 kD)
Dilution	WB=1:500-2000,IHC-P=1:100-500,IHC-F=1:100-500,ICC/IF=1:100-500,IF=1:100-

500,ELISA=1:5000-10000

Storage

Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.

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

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