

**ARPC1B Antibody (Center) Blocking Peptide**  
**Synthetic peptide**  
**Catalog # BP8754c****Specification****ARPC1B Antibody (Center) Blocking Peptide - Product Information**Primary Accession [O15143](#)**ARPC1B Antibody (Center) Blocking Peptide - 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**

The synthetic peptide sequence used to generate the antibody [AP8754c](#) was selected from the Center region of human ARPC1B. A 10 to 100 fold molar excess to antibody is recommended. Precise conditions should be optimized for a particular assay.

**Format**

Peptides are lyophilized in a solid powder format. Peptides can be reconstituted in solution using the appropriate buffer as needed.

**Storage**

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C.

**Precautions**

This product is for research use only. Not for use in diagnostic or therapeutic procedures.

**ARPC1B Antibody (Center) Blocking Peptide - 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](http://www.uniprot.org/citations/11741539), PubMed:[9230079](http://www.uniprot.org/citations/9230079)). The Arp2/3 complex mediates the formation of branched actin networks in the cytoplasm, providing the force for cell motility (PubMed:[11741539](http://www.uniprot.org/citations/11741539), PubMed:[9230079](http://www.uniprot.org/citations/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:<a href="http://www.uniprot.org/citations/29925947" target="\_blank">29925947</a>). 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:<a href="http://www.uniprot.org/citations/29925947" target="\_blank">29925947</a>).

**Cellular Location**

Cytoplasm, cytoskeleton. Nucleus

**ARPC1B Antibody (Center) Blocking Peptide - Protocols**

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

- [Blocking Peptides](#)

**ARPC1B Antibody (Center) Blocking Peptide - Images****ARPC1B Antibody (Center) Blocking Peptide - 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) Blocking Peptide - References**

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