

**Goat Anti-ARPC3 Antibody**  
**Peptide-affinity purified goat antibody**  
**Catalog # AF1110a****Specification**

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**Goat Anti-ARPC3 Antibody - Product Information**

Application	WB, E
Primary Accession	<a href="#">O15145</a>
Other Accession	<a href="#">NP_005710</a> , <a href="#">10094</a> , <a href="#">56378 (mouse)</a>
Reactivity	Human, Mouse
Predicted	Rat, Dog
Host	Goat
Clonality	Polyclonal
Concentration	100ug/200ul
Isotype	IgG
Calculated MW	20547

**Goat Anti-ARPC3 Antibody - Additional Information****Gene ID** 10094**Other Names**

Actin-related protein 2/3 complex subunit 3, Arp2/3 complex 21 kDa subunit, p21-ARC, ARPC3, ARC21

**Dilution**

WB~~1:1000

E~~N/A

**Format**

0.5 mg IgG/ml in Tris saline (20mM Tris pH7.3, 150mM NaCl), 0.02% sodium azide, with 0.5% bovine serum albumin

**Storage**

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

**Precautions**

Goat Anti-ARPC3 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

**Goat Anti-ARPC3 Antibody - Protein Information****Name** ARPC3**Synonyms** ARC21

**Function**

Component of the Arp2/3 complex, a multiprotein complex that mediates actin polymerization upon stimulation by nucleation-promoting factor (NPF) (PubMed:<a href="http://www.uniprot.org/citations/9230079" target="\_blank">9230079</a>). The Arp2/3 complex mediates the formation of branched actin networks in the cytoplasm, providing the force for cell motility (PubMed:<a href="http://www.uniprot.org/citations/9230079" target="\_blank">9230079</a>). 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. Cell projection Nucleus

**Goat Anti-ARPC3 Antibody - 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](#)

**Goat Anti-ARPC3 Antibody - Images**

AF1110a staining (1 µg/ml) of Mouse Brain lysate (RIPA buffer, 35 µg total protein per lane). Primary incubated for 1 hour. Detected by western blot using chemiluminescence.

**Goat Anti-ARPC3 Antibody - Background**

This gene encodes one of seven subunits of the human Arp2/3 protein complex. The Arp2/3 protein

complex has been implicated in the control of actin polymerization in cells and has been conserved through evolution. The exact role of the protein encoded by this gene, the p21 subunit, has yet to be determined.

#### **Goat Anti-ARPC3 Antibody - References**

Large-scale mapping of human protein-protein interactions by mass spectrometry. Ewing RM, et al. Mol Syst Biol, 2007. PMID 17353931.

A human protein-protein interaction network: a resource for annotating the proteome. Stelzl U, et al. Cell, 2005 Sep 23. PMID 16169070.

Golgi-localized GAP for Cdc42 functions downstream of ARF1 to control Arp2/3 complex and F-actin dynamics. Dubois T, et al. Nat Cell Biol, 2005 Apr. PMID 15793564.

Nucleolar proteome dynamics. Andersen JS, et al. Nature, 2005 Jan 6. PMID 15635413.

The status, quality, and expansion of the NIH full-length cDNA project: the Mammalian Gene Collection (MGC). Gerhard DS, et al. Genome Res, 2004 Oct. PMID 15489334.