

**Goat Anti-ARPC2 Antibody**  
Peptide-affinity purified goat antibody  
Catalog # AF1109a

**Specification**

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**Goat Anti-ARPC2 Antibody - Product Information**

Application	IHC, WB
Primary Accession	<a href="#">O15144</a>
Other Accession	<a href="#">NP_690601</a> , <a href="#">10109</a> , <a href="#">76709 (mouse)</a>
Reactivity	Human
Predicted	Mouse, Rat, Dog
Host	Goat
Clonality	Polyclonal
Concentration	100ug/200ul
Isotype	IgG
Calculated MW	34333

**Goat Anti-ARPC2 Antibody - Additional Information**

**Gene ID** 10109

**Other Names**

Actin-related protein 2/3 complex subunit 2, Arp2/3 complex 34 kDa subunit, p34-ARC, ARPC2, ARC34

**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-ARPC2 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

**Goat Anti-ARPC2 Antibody - Protein Information**

**Name** ARPC2

**Synonyms** ARC34

**Function**

Actin-binding 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>). Seems to contact the mother actin filament (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

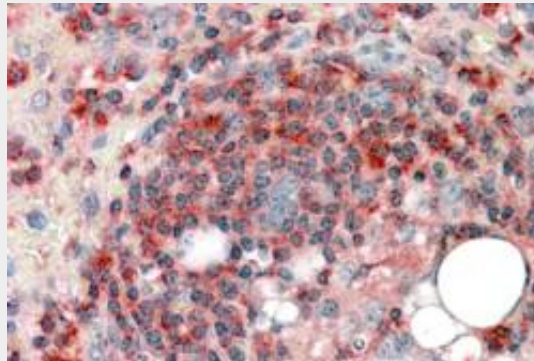
Cytoplasm, cytoskeleton. Cell projection. Synapse, synaptosome {ECO:0000250|UniProtKB:Q9CVB6}. Nucleus

#### Goat Anti-ARPC2 Antibody - Protocols

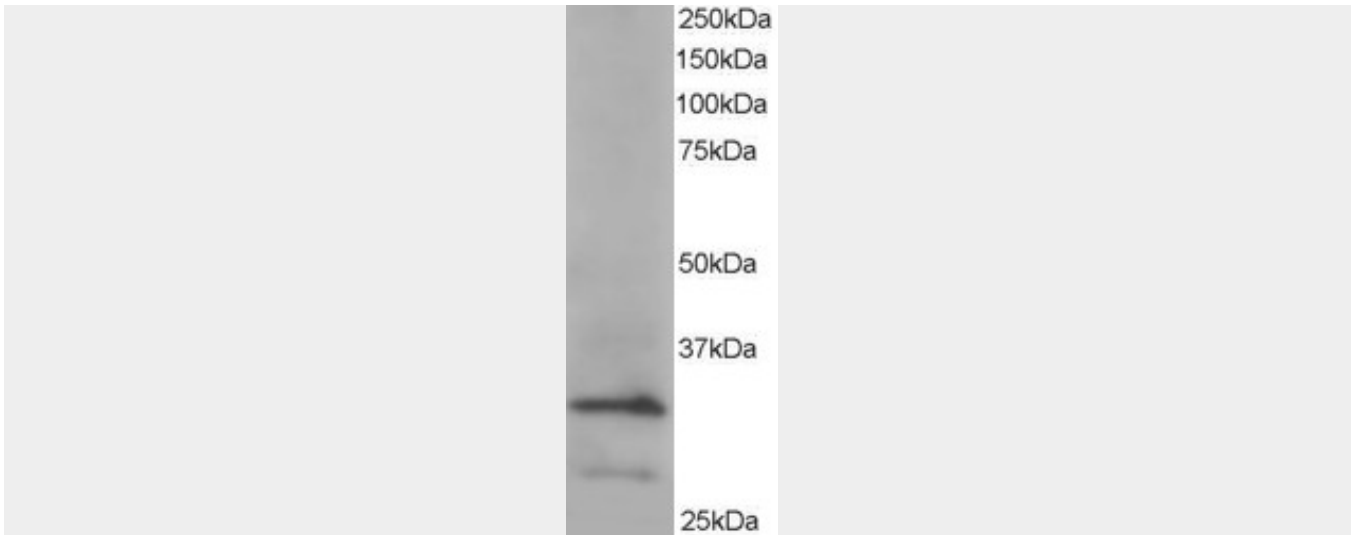
Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

#### Goat Anti-ARPC2 Antibody - Images



AF1109a (3.8 µg/ml) staining of paraffin embedded Human Spleen. Steamed antigen retrieval with citrate buffer pH 6, AP-staining.



AF1109a staining (0.2  $\mu\text{g/ml}$ ) of HeLa lysate (RIPA buffer, 35  $\mu\text{g}$  total protein per lane). Primary incubated for 1 hour. Detected by western blot using chemiluminescence.

### Goat Anti-ARPC2 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 p34 subunit, has yet to be determined. Two alternatively spliced variants have been characterized to date. Additional alternatively spliced variants have been described but their full length nature has not been determined.

### Goat Anti-ARPC2 Antibody - References

Functional characterization of Wiskott-Aldrich syndrome protein and scar homolog (WASH), a bi-modular nucleation-promoting factor able to interact with biogenesis of lysosome-related organelle subunit 2 (BLOS2) and gamma-tubulin. Monfregola J, et al. *J Biol Chem*, 2010 May 28. PMID 20308062.

Genetic analysis in a Dutch study sample identifies more ulcerative colitis susceptibility loci and shows their additive role in disease risk. Festen EA, et al. *Am J Gastroenterol*, 2010 Feb. PMID 19861958.

Sequence variants in IL10, ARPC2 and multiple other loci contribute to ulcerative colitis susceptibility. Franke A, et al. *Nat Genet*, 2008 Nov. PMID 18836448.

Overexpression of N-WASP in the brain of human epilepsy. Xiao F, et al. *Brain Res*, 2008 Oct 3. PMID 18708039.

Toward a confocal subcellular atlas of the human proteome. Barbe L, et al. *Mol Cell Proteomics*, 2008 Mar. PMID 18029348.