

Goat Anti-ARPC3 Antibody

Peptide-affinity purified goat antibody Catalog # AF1110a

Specification

Goat Anti-ARPC3 Antibody - Product Information

Application WB
Primary Accession 015145

Other Accession <u>NP_005710</u>, <u>10094</u>, <u>56378 (mouse)</u>

Reactivity Human, Mouse Predicted Rat, Dog, Cow

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

Format

0.5~mg lgG/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: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

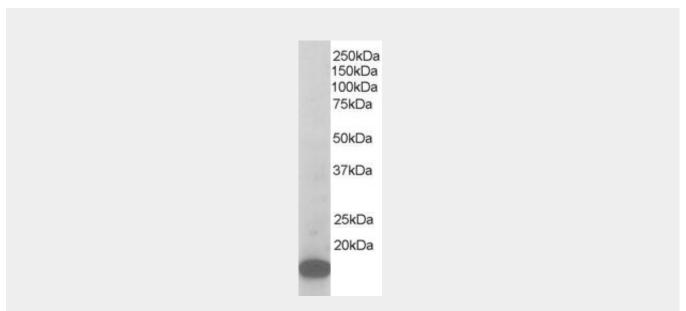
Cytoplasm, cytoskeleton. Cell projection Nucleus

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 Cytomety
- Cell Culture

Goat Anti-ARPC3 Antibody - Images



AF1110a staining (1 μ g/ml) of Mouse Brain lysate (RIPA buffer, 35 μ g 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.