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Goat Anti-ARP2/3 subunit 1B Antibody

Peptide-affinity purified goat antibody
Catalog # AF1108a

Specification

Goat Anti-ARP2/3 subunit 1B Antibody - Product Information

Application	**WB, IHC**
Primary Accession	O15143
Other Accession	NP_005711, 10095
Reactivity	**Human**
Predicted	**Mouse, Rat, Pig, Dog, Cow**
Host	**Goat**
Clonality	**Polyclonal**
Concentration	**100ug/200ul**
Isotype	**IgG**
Calculated MW	**40950**

Goat Anti-ARP2/3 subunit 1B Antibody - 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

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-ARP2/3 subunit 1B Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

Goat Anti-ARP2/3 subunit 1B Antibody - 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:<a

href="http://www.uniprot.org/citations/9230079" target="_blank">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

Goat Anti-ARP2/3 subunit 1B 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-ARP2/3 subunit 1B Antibody - Images

AF1108a staining (2 µg/ml) of Human Liver lysate (RIPA buffer, 35 µg total protein per lane). Primary incubated for 1 hour. Detected by chemiluminescence.

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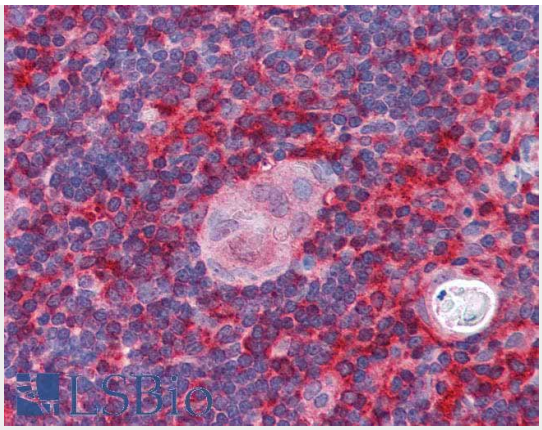

AF1108a (5 µg/ml) staining of paraffin embedded Human Thymus. Steamed antigen retrieval with citrate buffer pH 6, AP-staining.

Goat Anti-ARP2/3 subunit 1B Antibody - Background

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.

Goat Anti-ARP2/3 subunit 1B Antibody - References

Arpc1b, a centrosomal protein, is both an activator and substrate of Aurora A. Molli PR, et al. J Cell Biol, 2010 Jul 12. PMID 20603326.
Large-scale mapping of human protein-protein interactions by mass spectrometry. Ewing RM, et al. Mol Syst Biol, 2007. PMID 17353931.
Arpc1b gene is a candidate prediction marker for choroidal malignant melanomas sensitive to radiotherapy. Kumagai K, et al. Invest Ophthalmol Vis Sci, 2006 Jun. PMID 16723437.
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.