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Goat Anti-SH3BP1 Antibody

Peptide-affinity purified goat antibody
Catalog # AF1987a

Specification

Goat Anti-SH3BP1 Antibody - Product Information

Application	**WB, IHC**
Primary Accession	Q9Y3L3
Other Accession	NP_061830, 23616
Reactivity	**Human**
Host	**Goat**
Clonality	**Polyclonal**
Concentration	**100ug/200ul**
Isotype	**IgG**
Calculated MW	**75713**

Goat Anti-SH3BP1 Antibody - Additional Information

Gene ID 23616

Other Names
SH3 domain-binding protein 1, 3BP-1, SH3BP1

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-SH3BP1 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

Goat Anti-SH3BP1 Antibody - Protein Information

Name SH3BP1 (HGNC:10824)

Function
GTPase activating protein (GAP) which specifically converts GTP-bound Rho-type GTPases including RAC1 and CDC42 in their inactive GDP-bound form. By specifically inactivating RAC1 at the leading edge of migrating cells, it regulates the spatiotemporal organization of cell protrusions which is important for proper cell migration (PubMed:21658605). Also negatively regulates CDC42 in the process of actin remodeling and the formation of epithelial cell junctions (PubMed:<a href="http://www.uniprot.org/citations/22891260"

target="_blank">22891260). Through its GAP activity toward RAC1 and/or CDC42 plays a specific role in phagocytosis of large particles. Specifically recruited by a PI3 kinase/PI3K-dependent mechanism to sites of large particles engagement, inactivates RAC1 and/or CDC42 allowing the reorganization of the underlying actin cytoskeleton required for engulfment (PubMed:26465210). It also plays a role in angiogenesis and the process of repulsive guidance as part of a semaphorin-plexin signaling pathway. Following the binding of PLXND1 to extracellular SEMA3E it dissociates from PLXND1 and inactivates RAC1, inducing the intracellular reorganization of the actin cytoskeleton and the collapse of cells (PubMed:24841563).

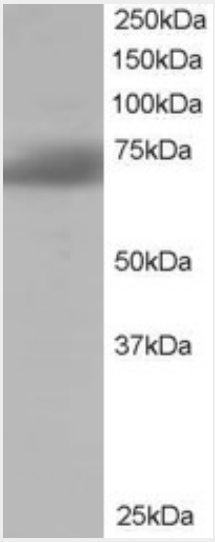
Cellular Location
Cell projection. Cell junction, tight junction. Cell junction, adherens junction. Cell projection, phagocytic cup. Nucleus Cytoplasm, cytosol. Note=Localizes at the leading edge of migrating cells (PubMed:21658605, PubMed:24841563) Accumulation at forming phagocytic cups is PI3 kinase/PI3K-dependent and is specific for sites of large particles engagement and their phosphatidylinositol 3,4,5-triphosphate membrane content (PubMed:26465210).

Goat Anti-SH3BP1 Antibody - Protocols

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

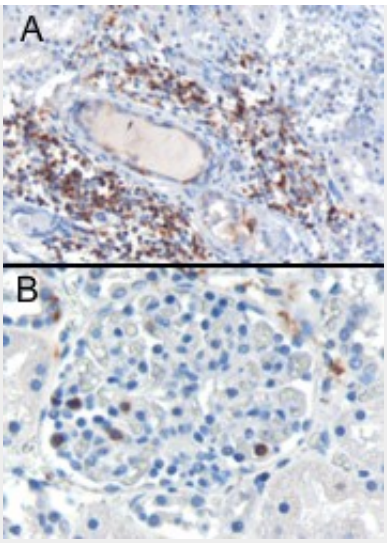
- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

Goat Anti-SH3BP1 Antibody - Images



AF1987a staining (1 µg/ml) of Human Brain lysate (RIPA buffer, 35 µg total protein per lane). Primary incubated for 1 hour. Detected by western blot using chemiluminescence.

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AF1987a (0.3 µg/ml) staining of paraffin embedded Human Kidnay. Cytoplasmic staining of lymphocytes A) in the interstitial parenchyma of the kidney. B) in a glomerulus of the kidney. Microwaved antigen retrieval with citrate buffer pH 6, HRP-staining.

Goat Anti-SH3BP1 Antibody - References

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.
A genome annotation-driven approach to cloning the human ORFeome. Collins JE, et al. Genome Biol, 2004. PMID 15461802.
Complete sequencing and characterization of 21,243 full-length human cDNAs. Ota T, et al. Nat Genet, 2004 Jan. PMID 14702039.
Generation and initial analysis of more than 15,000 full-length human and mouse cDNA sequences. Strausberg RL, et al. Proc Natl Acad Sci U S A, 2002 Dec 24. PMID 12477932.
Identification of novel SH3 domain ligands for the Src family kinase Hck. Wiskott-Aldrich syndrome protein (WASP), WASP-interacting protein (WIP), and ELMO1. Scott MP, et al. J Biol Chem, 2002 Aug 2. PMID 12029088.