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Goat Anti-BAIAP2 (isoform 1) Antibody

Peptide-affinity purified goat antibody

Catalog # AF1139a

Specification

Goat Anti-BAIAP2 (isoform 1) Antibody - Product Information

Application	**WB, IHC**
Primary Accession	Q9UQB8
Other Accession	NP_059344, 10458, 108100 (mouse), 117542 (rat)
Reactivity	**Human**
Predicted	**Mouse, Rat**
Host	**Goat**
Clonality	**Polyclonal**
Concentration	**100ug/200ul**
Isotype	**IgG**
Calculated MW	**60868**

Goat Anti-BAIAP2 (isoform 1) Antibody - Additional Information

Gene ID 10458

Other Names
Brain-specific angiogenesis inhibitor 1-associated protein 2, BAI-associated protein 2, BAI1-associated protein 2, Protein BAP2, Fas ligand-associated factor 3, FLAF3, Insulin receptor substrate p53/p58, IRS-58, IRSp53/58, Insulin receptor substrate protein of 53 kDa, IRSp53, Insulin receptor substrate p53, BAIAP2

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-BAIAP2 (isoform 1) Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

Goat Anti-BAIAP2 (isoform 1) Antibody - Protein Information

Name BAIAP2

Function
Adapter protein that links membrane-bound small G-proteins to cytoplasmic effector proteins. Necessary for CDC42-mediated reorganization of the actin cytoskeleton and for RAC1-mediated

membrane ruffling. Involved in the regulation of the actin cytoskeleton by WASF family members and the Arp2/3 complex. Plays a role in neurite growth. Acts syngeristically with ENAH to promote filipodia formation. Plays a role in the reorganization of the actin cytoskeleton in response to bacterial infection. Participates in actin bundling when associated with EPS8, promoting filopodial protrusions.

Cellular Location
Cytoplasm. Membrane; Peripheral membrane protein. Cell projection, filopodium. Cell projection, ruffle. Cytoplasm, cytoskeleton. Note=Detected throughout the cytoplasm in the absence of specific binding partners. Detected in filopodia and close to membrane ruffles. Recruited to actin pedestals that are formed upon infection by bacteria at bacterial attachment sites

Tissue Location
Isoform 1 and isoform 4 are expressed almost exclusively in brain. Isoform 4 is barely detectable in placenta, prostate and testis. A short isoform is ubiquitous, with the highest expression in liver, prostate, testis and placenta

Goat Anti-BAIAP2 (isoform 1) Antibody - Protocols

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

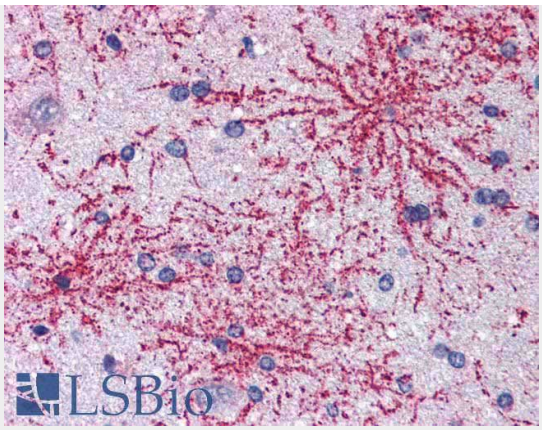
- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

Goat Anti-BAIAP2 (isoform 1) Antibody - Images



AF1139a staining (1 µg/ml) of Human Brain lysate (RIPA buffer, 35 µg total protein per lane). Primary incubated for 1 hour. Detected by chemiluminescence.

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AF1139a (5 µg/ml) staining of paraffin embedded Human Cortex. Steamed antigen retrieval with citrate buffer pH 6, AP-staining.

Goat Anti-BAIAP2 (isoform 1) Antibody - Background

The protein encoded by this gene has been identified as a brain-specific angiogenesis inhibitor (BAI1)-binding protein. This adaptor protein links membrane bound G-proteins to cytoplasmic effector proteins. This protein functions as an insulin receptor tyrosine kinase substrate and suggests a role for insulin in the central nervous system. It also associates with a downstream effector of Rho small G proteins, which is associated with the formation of stress fibers and cytokinesis. This protein is involved in lamellipodia and filopodia formation in motile cells and may affect neuronal growth-cone guidance. This protein has also been identified as interacting with the dentatorubral-pallidoluysian atrophy gene, which is associated with an autosomal dominant neurodegenerative disease. Alternative splicing results in multiple transcript variants encoding distinct isoforms.

Goat Anti-BAIAP2 (isoform 1) Antibody - References

The interplay between Eps8 and IRSp53 contributes to Src-mediated transformation. Liu PS, et al. Oncogene, 2010 Jul 8. PMID 20418908.
Scaffold proteins IRSp53 and spinophilin regulate localized Rac activation by T-lymphocyte invasion and metastasis protein 1 (TIAM1). Rajagopal S, et al. J Biol Chem, 2010 Jun 4. PMID 20360004.
Regulation of IRSp53-dependent filopodial dynamics by antagonism between 14-3-3 binding and SH3-mediated localization. Robens JM, et al. Mol Cell Biol, 2010 Feb. PMID 19933840.
Interaction between enterohemorrhagic Escherichia coli O157:H7 EspFu and IRSp53 induces dynamic membrane remodeling in epithelial cells. Morita-Ishihara T, et al. Jpn J Infect Dis, 2009 Sep. PMID 19762983.
Case-control study of six genes asymmetrically expressed in the two cerebral hemispheres: association of BAIAP2 with attention-deficit/hyperactivity disorder. Ribas□s M, et al. Biol Psychiatry, 2009 Nov 15. PMID 19733838.