10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

BAIAP2 Antibody (C-term) Blocking Peptide

Synthetic peptide
Catalog # BP8174a

Specification

BAIAP2 Antibody (C-term) Blocking Peptide - Product Information

Primary Accession	Q9UQB8
Other Accession	NP_006331

BAIAP2 Antibody (C-term) Blocking Peptide - 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

Target/Specificity
The synthetic peptide sequence used to generate the antibody AP8174a was selected from the C-term region of human BAIAP2 . A 10 to 100 fold molar excess to antibody is recommended. Precise conditions should be optimized for a particular assay.

Format
Peptides are lyophilized in a solid powder format. Peptides can be reconstituted in solution using the appropriate buffer as needed.

Storage
Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C.

Precautions
This product is for research use only. Not for use in diagnostic or therapeutic procedures.

BAIAP2 Antibody (C-term) Blocking Peptide - 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

BAIAP2 Antibody (C-term) Blocking Peptide - Protocols

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

- Blocking Peptides

BAIAP2 Antibody (C-term) Blocking Peptide - Images

BAIAP2 Antibody (C-term) Blocking Peptide - Background

BAIAP2, a target of p53, has been identified as a brain-specific angiogenesis inhibitor (BAI1)-binding protein. This interaction at the cytoplasmic membrane is crucial to the function of this protein, which may be involved in neuronal growth-cone guidance. This protein functions as an insulin receptor tyrosine kinase substrate and suggests a role for insulin in the central nervous system. This protein has also been identified as interacting with the dentatorubral-pallidoluysian atrophy gene, which is associated with an autosomal dominant neurodegenerative disease. It also associates with a downstream effector of Rho small G proteins, which is associated with the formation of stress fibers and cytokinesis.

BAIAP2 Antibody (C-term) Blocking Peptide - References

Fujiwara, T., et al., Biochem. Biophys. Res. Commun. 271(3):626-629 (2000).Abbott, M.A., et al., J. Neurosci. 19(17):7300-7308 (1999).Okamura-Oho, Y., et al., Hum. Mol. Genet. 8(6):947-957 (1999).Oda, K., et al., Cytogenet. Cell Genet. 84 (1-2), 75-82 (1999).