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BAIAP2 Antibody (C-term)

Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP8174A

Product Information

Application	WB, IHC-P, E
Primary Accession	Q9UQB8
Other Accession	NP_006331
Reactivity	Human, Mouse
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Calculated MW	60868
Antigen Region	492-518

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	This BAIAP2 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 492-518 amino acids from the C-terminal region of human BAIAP2.
Dilution	WB~~1:1000 IHC-P~~1:100~500 E~~Use at an assay dependent concentration.
Format	Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is prepared by Saturated Ammonium Sulfate (SAS) precipitation followed by dialysis against PBS.
Storage	Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.
Precautions	BAIAP2 Antibody (C-term) is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	BAIAP2 {ECO:0000303|PubMed:10343108, ECO:0000312|HGNC:HGNC:947}
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, neuronal differentiation and neuronal migration (PubMed:41133935). 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 (PubMed:41133935).
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

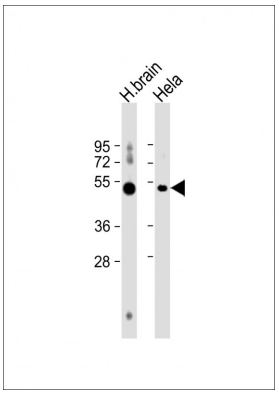
Background

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.

References

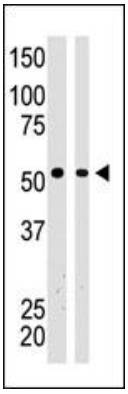
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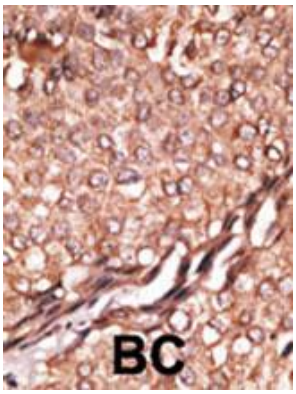
Images



All lanes : Anti-BAIAP2 Antibody (C-term) at 1:1000 dilution Lane 1: human brain lysate Lane 2: Hela whole cell lysate Lysates/proteins at 20 µg per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/10000 dilution. Predicted band size : 61 kDa Blocking/Dilution buffer: 5% NFDM/TBST.

The anti-BAIAP2 Pab (Cat. #AP8174a) is used in Western blot to detect BAIAP2 in mouse brain tissue lysate (Lane 1) and A375 cell lysate (Lane 2).





Formalin-fixed and paraffin-embedded human cancer tissue reacted with the primary antibody, which was peroxidase-conjugated to the secondary antibody, followed by AEC staining. This data demonstrates the use of this antibody for immunohistochemistry; clinical relevance has not been evaluated. BC = breast carcinoma; HC = hepatocarcinoma.

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.