

BAP3 Antibody

Catalog # ASC10657

Product Information

Application	WB, E, IHC-P
Primary Accession	O94812
Other Accession	BAA34710 , 3929917
Reactivity	Human
Host	Rabbit
Clonality	Polyclonal
Isotype	IgG
Calculated MW	131901
Concentration (mg/ml)	1 mg/mL
Conjugate	Unconjugated
Application Notes	BAP3 antibody can be used for the detection of BAP3 by Western blot at 1 and 2 μ g/mL. Antibody can also be used for immunohistochemistry starting at 5 μ g/mL.

Additional Information

Gene ID	8938
Other Names	BAI1-associated protein 3, BAP3, BAIAP3, KIAA0734
Target/Specificity	BAIAP3; BAP3 is known to have two isoforms; this BAP3 antibody will recognize only isoform 2. Lower molecular weight bands may represent cleavage or degradation products.
Reconstitution & Storage	BAP3 antibody can be stored at 4°C for three months and -20°C, stable for up to one year. As with all antibodies care should be taken to avoid repeated freeze thaw cycles. Antibodies should not be exposed to prolonged high temperatures.
Precautions	BAP3 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	BAIAP3 {ECO:0000303 PubMed:28626000, ECO:0000312 HGNC:HGNC:948}
Function	Functions in endosome to Golgi retrograde transport. In response to calcium influx, may interact with SNARE fusion receptors and membrane phospholipids to mediate endosome fusion with the trans- Golgi network. By promoting the recycling of secretory vesicle transmembrane proteins, it indirectly controls dense-core secretory vesicle biogenesis, maturation and their ability to mediate the constitutive and regulated secretion of neurotransmitters and hormones. May regulate behavior and food intake by controlling calcium-stimulated exocytosis of neurotransmitters including NPY

and serotonin and hormones like insulin (PubMed:[28626000](#)). Proposed to play a role in hypothalamic neuronal firing by modulating gamma-aminobutyric acid (GABA)ergic inhibitory neurotransmission (By similarity).

Cellular Location

Cytoplasm, cytosol. Recycling endosome membrane; Peripheral membrane protein. Late endosome membrane; Peripheral membrane protein. Golgi apparatus, trans-Golgi network membrane; Peripheral membrane protein. Cell membrane; Peripheral membrane protein. Note=Rapidly recruited to the plasma membrane and to Golgi structures in response to increased intracellular calcium concentration.

Tissue Location

Predominantly expressed in brain (PubMed:9790924). Also expressed in nonneural tissues such as breast and testes epithelium (PubMed:12498718).

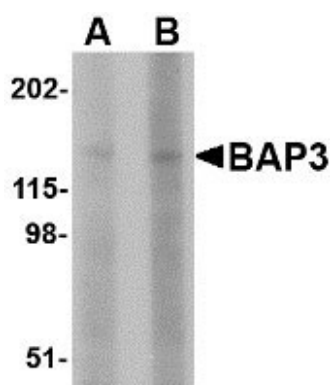
Background

BAP3 Antibody: BAP3 was initially identified through interaction in a yeast two-hybrid system with the brain-specific angiogenesis inhibitor 1, a p53-target gene that encodes a seven-span transmembrane protein member of the secretin receptor family. BAP3 is predominantly expressed in the brain and possess high homology with Munc13 and synaptotagmin, suggesting that BAP3 may play a role in regulating neurotransmitter release. Recent experiments have shown that BAP3 is induced in certain tumors such as desmoplastic small round cell tumor. Ectopic expression of BAP3 in tumor cells dramatically enhances growth in low serum conditions and colony formation in soft agar, suggesting that the regulated exocytotic pathway may play a role in cancer cell proliferation.

References

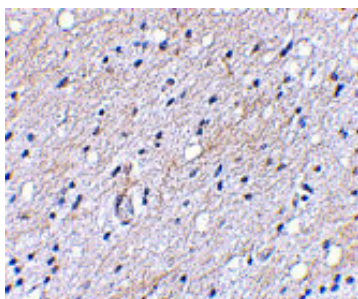
Shiratsuchi T, Oda K, Nishimori H, et al. Cloning and characterization of BAP (BAI-associated protein 3), a C2 domain-containing protein that interacts with BAI1. *Biochem. Biophys. Res. Comm.*1998; 251:158-65.
Palmer RE, Lee SB, Wong JC, et al. Induction of BAIAP3 by the EWS-WT1 chimeric fusion implicates regulated exocytosis in tumorigenesis. *Cancer Cell*2002; 2:497-505.

Images



Western blot analysis of BAP3 in SK-N-SH cell lysate with BAP3 antibody at (A) 1 and (B) 2 µg/mL.

Immunohistochemical staining of human brain tissue using BAP3 antibody at 5 µg/mL.



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