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SH3BP4 Antibody

Catalog # ASC10906

Product Information

Application	WB, E, IHC-P
Primary Accession	Q9P0V3
Other Accession	NP_055336, 7657562
Reactivity	Human, Mouse, Rat
Host	Rabbit
Clonality	Polyclonal
Isotype	IgG
Calculated MW	107496
Concentration (mg/ml)	1 mg/mL
Conjugate	Unconjugated
Application Notes	SH3BP4 antibody can be used for detection of SH3BP4 by Western blot at 1 - 2 g/mL. Antibody can also be used for immunohistochemistry starting at 5 g/mL.

Additional Information

Gene ID	23677
Other Names	SH3 domain-binding protein 4, EH-binding protein 10, Transferrin receptor-trafficking protein, SH3BP4, BOG25, EHB10, TTP
Target/Specificity	SH3BP4;
Reconstitution & Storage	SH3BP4 antibody can be stored at 4℃ for three months and -20℃, 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	SH3BP4 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	SH3BP4
Synonyms	BOG25, EHB10, TTP
Function	May function in transferrin receptor internalization at the plasma membrane through a cargo-specific control of clathrin-mediated endocytosis. Alternatively, may act as a negative regulator of the amino acid-induced TOR signaling by inhibiting the formation of active Rag GTPase complexes. Preferentially binds inactive Rag GTPase complexes and prevents their interaction with the mTORC1 complex inhibiting its relocalization to lysosomes and its activation. Thereby, may indirectly regulate cell growth,

	proliferation and autophagy.
Cellular Location	Membrane, clathrin-coated pit. Cytoplasmic vesicle, clathrin-coated vesicle. Nucleus Note=Specifically associated with transferrin receptor-containing clathrin-coated pits and clathrin-coated vesicles. May also localize to the nucleus
Tissue Location	Expressed in all tissues tested with higher expression in pancreas. Expressed by retinal pigment epithelial cells (at protein level).

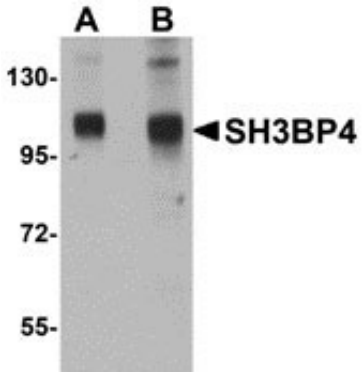
Background

SH3BP4 Antibody: SH3BP4 was initially isolated as a novel cDNA using differential display analysis using cultured human corneal fibroblasts. The protein contains three Asn-Pro-Phe (NPF) motifs, an SH3 domain, a PXXP motif, a bipartite nuclear targeting signal, and a tyrosine phosphorylation site. SH3BP4 has been shown to interact with specific endocytic proteins such as clathrin, dynamin, and the transferrin receptor (TfR) and localizes to TfR-containing coated pits and vesicles. It is thought to be involved in cargo-specific control of clathrin-mediated endocytosis, specifically controlling the internalization of TfR. At least two isoforms of SH3BP4 are known to exist.

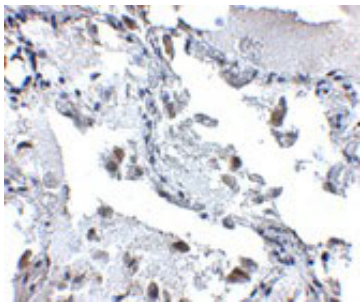
References

Dunlevy JR, Berryhill BL, Vergnes JP, et al. Cloning, chromosomal localization, and characterization of cDNA from a novel gene, SH3BP4, expressed by human corneal fibroblasts. Genomics1999; 62:519-24.
Tosoni D, Puri C, Confalonieri S, et al. TTP specifically regulates the internalization of the transferrin receptor. Cell2005; 123:875-888.

Images



Western blot analysis of SH3BP4 in rat lung tissue lysate with SH3BP4 antibody at (A) 1 and (B) 2 µg/mL.



Immunohistochemistry of SH3BP4 in human lung tissue with SH3BP4 antibody at 5 µg/mL.