

SH3BP4 Antibody

Catalog # ASC10906

Specification

SH3BP4 Antibody - Product Information

Application Primary Accession Other Accession Reactivity Host Clonality Isotype Application Notes

WB, IHC-P, E <u>O9P0V3</u> NP_055336, 7657562 Human, Mouse, Rat Rabbit Polyclonal IgG SH3BP4 antibody can be used for detection of SH3BP4 by Western blot at 1 - 2 μg/mL. Antibody can also be used for immunohistochemistry starting at 5 μg/mL.

SH3BP4 Antibody - Additional Information

Gene ID Target/Specificity SH3BP4;

23677

Reconstitution & Storage

SH3BP4 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 SH3BP4 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

SH3BP4 Antibody - 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).

SH3BP4 Antibody - Protocols

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

- <u>Western Blot</u>
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- <u>Cell Culture</u>

SH3BP4 Antibody - Images



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



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

SH3BP4 Antibody - 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.

SH3BP4 Antibody - 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.