

SH3BP4 (S-17): sc-162189

BACKGROUND

SH3BP4 (SH3-domain binding protein 4), also known as TTP or BOG25, is a 963 amino acid protein that localizes to the nucleus and is ubiquitously expressed with higher expression in pancreas. SH3BP4 exists as a homodimer or homooligomer and consists of three Asn-Pro-Phe (NPF) motifs, an SH3 domain, a PXXP motif, a bipartite nuclear targeting signal and a tyrosine phosphorylation site. SH3BP4 associates with endocytic proteins, including clathrin and dynamin and may also be involved in intracellular sorting as well as the cell cycle. SH3BP4 is encoded by a gene located on human chromosome 2, which houses over 1,400 genes and comprises nearly 8% of the human genome. Harlequin ichthyosis, a rare and morbid skin deformity, is associated with mutations in the ABCA12 gene, while the lipid metabolic disorder sitosterolemia is associated with defects in the ABCG5 and ABCG8 genes. Additionally, an extremely rare recessive genetic disorder, Alström syndrome, is caused by mutations in the ALMS1 gene, which maps to chromosome 2.

REFERENCES

1. Ijdo, J.W., et al. 1991. Origin of human chromosome 2: an ancestral telomere-telomere fusion. *Proc. Natl. Acad. Sci. USA* 88: 9051-9055.
2. Dunlevy, J.R., et al. 1999. Cloning, chromosomal localization, and characterization of cDNA from a novel gene, SH3BP4, expressed by human corneal fibroblasts. *Genomics* 62: 519-524.
3. Khanobdee, K., et al. 2004. Nuclear and plasma membrane localization of SH3BP4 in retinal pigment epithelial cells. *Mol. Vis.* 10: 933-942.
4. Tosoni, D., et al. 2005. TTP specifically regulates the internalization of the transferrin receptor. *Cell* 123: 875-888.
5. Hillier, L.W., et al. 2005. Generation and annotation of the DNA sequences of human chromosomes 2 and 4. *Nature* 434: 724-731.
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CHROMOSOMAL LOCATION

Genetic locus: SH3BP4 (human) mapping to 2q37.2; Sh3bp4 (mouse) mapping to 1 D.

SOURCE

SH3BP4 (S-17) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the N-terminus of SH3BP4 of human origin.

PRODUCT

Each vial contains 200 µg IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-162189 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

STORAGE

Store at 4° C, ****DO NOT FREEZE****. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

APPLICATIONS

SH3BP4 (S-17) is recommended for detection of SH3BP4 of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000); non cross-reactive with SH3BP5L.

SH3BP4 (S-17) is also recommended for detection of SH3BP4 in additional species, including equine, canine and bovine.

Suitable for use as control antibody for SH3BP4 siRNA (h): sc-94846, SH3BP4 siRNA (m): sc-153436, SH3BP4 shRNA Plasmid (h): sc-94846-SH, SH3BP4 shRNA Plasmid (m): sc-153436-SH, SH3BP4 shRNA (h) Lentiviral Particles: sc-94846-V and SH3BP4 shRNA (m) Lentiviral Particles: sc-153436-V.

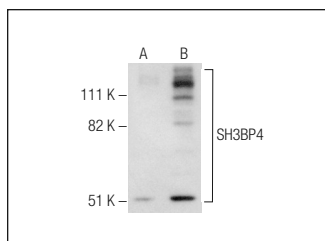
Molecular Weight of SH3BP4 isoforms 1/2: 107/60 kDa.

Positive Controls: SH3BP4 (m): 293T Lysate: sc-123533.

RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use donkey anti-goat IgG-HRP: sc-2020 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible donkey anti-goat IgG-HRP: sc-2033 (dilution range: 1:2000-1:5000), Cruz Marker™ Molecular Weight Standards: sc-2035, TBS Blotto A Blocking Reagent: sc-2333 and Western Blotting Luminol Reagent: sc-2048. 2) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) Immunofluorescence: use donkey anti-goat IgG-FITC: sc-2024 (dilution range: 1:100-1:400) or donkey anti-goat IgG-TR: sc-2783 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

DATA



SH3BP4 (S-17): sc-162189. Western blot analysis of SH3BP4 expression in non-transfected: sc-117752 (A) and mouse SH3BP4 transfected: sc-123533 (B) 293T whole cell lysates.

RESEARCH USE

For research use only, not for use in diagnostic procedures.

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Try **SH3BP4 (A-6): sc-393730**, our highly recommended monoclonal alternative to SH3BP4 (S-17).