

Rabbit anti-Human SSBP1 Polyclonal Antibody | anti-SSBP1 antibody

Anti-SSBP1 Antibody Picoband

CATALOG #	HOST	REACTIVITY	APPLICATIONS
AAA19836	Rabbit	Human	ELISA, Flow Cytometry, Functional Assay, Immunofluorescence, Immunohistochemistry, Immunocytochemistry, Western Blot

PRODUCT SYNONYMS

SSBP1; Polyclonal Antibody; Anti-SSBP1 Antibody Picoband; Long-chain-fatty-acid--CoA ligase 5; docking protein 7; Protein Dok-7; Downstream of tyrosine kinase 7; DOK7; C4orf25; anti-SSBP1 antibody

PRODUCT SPECIFICATIONS

Host	Rabbit
Reactivity	Human
Clonality	Polyclonal
Isotype	Rabbit IgG
Specificity	Preferentially Expressed in skeletal muscle and heart. Present in thigh muscle, diaphragm and heart but not in the liver or spleen .
Purity/Purification	Immunogen affinity purified.
Form/Format	Lyophilized. Each vial contains 4 mg Trehalose, 0.9 mg NaCl, 0.2 mg Na ₂ HPO ₄ .
Applicable Applications for anti-SSBP1 antibody	ELISA, FCM/FACS (Flow Cytometry), IF (Immunofluorescence), IHC (Immunohistochemistry), ICC (Immunocytochemistry), WB (Western Blot)
Application Notes	WB: 0.1-0.25ug/ml, Human IHC(Paraffin-embedded Section), 1-2ug/ml, Human ICC/IF: 5ug/ml, Human IF: 5ug/ml, Human FC/FACS (Fixed): 1-3ug/1x10 ⁶ cells, Human ELISA: 0.1-0.5ug/ml
Immunogen	E coli-derived human SSBP1 recombinant protein (Position: M1-E148).
Subcellular Localization	Cell membrane, Peripheral membrane protein, Synapse
Reconstitution	Adding 0.2 ml of distilled water will yield a concentration of 500ug/ml.
Cross Reactivity	No cross-reactivity with other proteins.
Protein Function	Probable muscle-intrinsic activator of MUSK that plays an essential role in neuromuscular synaptogenesis. Acts in aneural activation of MUSK and subsequent acetylcholine receptor (AChR) clustering in myotubes. Induces autophosphorylation of MUSK.
Preparation and Storage	At -20 degree C for one year from date of receipt. After reconstitution, at 4 degree C for one month. It can also be aliquotted and stored frozen at -20 degree C for six months.Avoid repeated freezing and thawing.



FCM (Flow Cytometry)

Figure 9. Flow Cytometry analysis of HL-60 cells using anti-SSBP1 antibody (AAA19836). Overlay histogram showing HL-60 cells stained with AAA19836 (Blue line). To facilitate intracellular staining, cells were fixed with 4% paraformaldehyde and permeabilized with permeabilization buffer. The cells were blocked with 10% normal goat serum. And then incubated with rabbit anti-SSBP1 Antibody (AAA19836, 1ug/1x106 cells) for 30 min at 20 degree C. DyLight488 conjugated goat anti-rabbit IgG was used as secondary antibody for 30 minutes at 20 degree C. Isotype control antibody (Green line) was rabbit IgG (1ug/1x106) used under the same conditions. Unlabelled sample without incubation with primary antibody and secondary antibody (Red line) was used as a blank control.



IF (Immunofluorescence)

Figure 8. IF analysis of SSBP1 using anti-SSBP1 antibody (AAA19836). SSBP1 was detected in an immunocytochemical section of U2OS cells. Enzyme antigen retrieval was performed using IHC enzyme antigen retrieval reagent (epitope retrieval solution). The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 5ug/mL rabbit anti-SSBP1 Antibody (AAA19836) overnight at 4 degree C. FITC Conjugated Goat Anti-Rabbit IgG (BA1105) was used as secondary antibody at 1:500 dilution and incubated for 30 minutes at 37 degree C. The section was counterstained with DAPI. Visualize using a fluorescence microscope and filter sets appropriate for the label used.



IF (Immunofluorescence)

Figure 6. IF analysis of SSBP1 using anti-SSBP1 antibody (AAA19836). SSBP1 was detected in a paraffin-embedded section of human colon cancer tissue. Heat mediated antigen retrieval was performed in EDTA buffer (pH 8.0, epitope retrieval solution). The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 5ug/mL rabbit anti-SSBP1 Antibody (AAA19836) overnight at 4 degree C. FITC Conjugated Goat Anti-Rabbit IgG (BA1105) was used as secondary antibody at 1:500 dilution and incubated for 30 minutes at 37 degree C. The section was counterstained with DAPI. Visualize using a fluorescence microscope and filter sets appropriate for the label used.



IHC (Immunohistochemistry)

Figure 5. IHC analysis of SSBP1 using anti-SSBP1 antibody (AAA19836). SSBP1 was detected in a paraffin-embedded section of human lung adenocarcinoma tissue. Heat mediated antigen retrieval was performed in EDTA buffer (pH 8.0, epitope retrieval solution). The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 2ug/ml rabbit anti-SSBP1 Antibody (AAA19836) overnight at 4 degree C. Peroxidase Conjugated Goat Anti-rabbit IgG was used as secondary antibody and incubated for 30 minutes at 37 degree C. The tissue section was developed using HRP Conjugated Rabbit IgG Super Vision Assay Kit (epitope retrieval solution). The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 2ug/ml rabbit anti-SSBP1 Antibody (AAA19836) overnight at 4 degree C. Peroxidase Conjugated Goat Anti-rabbit IgG was used as secondary antibody and incubated for 30 minutes at 37 degree C. The tissue section was developed using HRP Conjugated Rabbit IgG Super Vision Assay Kit (epitope retrieval solution). The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 2ug/ml rabbit anti-SSBP1 Antibody (AAA19836) overnight at 4 degree C. Peroxidase Conjugated Goat Anti-rabbit IgG was used as secondary antibody and incubated for 30 minutes at 37 degree C. The tissue section was developed using HRP Conjugated Rabbit IgG Super Vision Assay Kit (epitope retrieval solution). The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 2ug/ml rabbit anti-SSBP1 Antibody (AAA19836) overnight at 4 degree C. Peroxidase Conjugated Goat Anti-rabbit IgG was used as secondary antibody and incubated for 30 minutes at 37 degree C. The tissue section was developed using HRP Conjugated Rabbit IgG Super Vision Assay Kit (Lane 2: human 293T whole cell lysates, Lane 3: human MOLT-4 whole cell lysates, Lane 4: human K562 whole cell lysates, Lane 5: human A549 whole cell lysates, Lane 6: human A375 whole cell lysates. After electrophoresis, proteins were transferred to a nitrocellulose membrane at 150 mA for 50-90 minutes. Blocked the membrane with 5% non-fat milk/TBS for 1.5 hour at RT. The membrane was incubated with rabbit anti-SSBP1 antigen affinity purified polyclonal antibody (#AAA19836) at 0.25ug/mL overnight at 4 degree C, then washed with TBS-0.1%Tween 3 times with 5 minutes each and probed with a goat anti-rabbit IgG-HRP secondary antibody at a dilution of 1:5000 for 1.5 hour at RT. The signal is developed using an Enhanced Chemiluminescent detection (ECL) kit with Tanon 5200 system. A specific band was detected for SSBP1 at approximately 16 kDa. The expected band size for SSBP1 is at 17-18 kDa.

ADDITIONAL INFORMATION

Related Product Information for anti-SSBP1 antibody	The brand Picoband indicates this is a premium antibody that guarantees superior quality, high affinity, and strong signals with minimal background in Western blot applications. Only our best-performing antibodies are designated as Picoband, ensuring unmatched performance.
Product Categories/Family for anti-SSBP1 antibody	Primary Antibodies; Adapters; Protein Phosphorylation; Receptor Tyrosine Kinases; Signal Transduction; Transmembrane; Tyrosine Kinases

References	1. Bogenhagen, D. F., Rousseau, D., Burke, S. The layered structure of human mitochondrial DNA nucleoids. J. Biol. Chem. 283: 3665-3675, 2008.2. Del Dotto, V., Ullah, F., Di Meo, I., Magini, P., Gusic, M., Maresca, A., Caporali, L., Palombo, F., Tagliavini, F., Baugh, E. H., Macao, B., Szilagyi, Z., and 35 others. SSBP1 mutations cause mtDNA depletion underlying a complex optic atrophy disorder. J. Clin. Invest. 130: 108-125, 2020.3. Huang, J., Gong, Z., Ghosal, G., Chen, J. SOSS complexes participate in the maintenance of genomic stability. Molec. Cell 35: 384-393, 2009.
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NCBI AND UNIPROT INFORMATION

NCBI GI #	374671775
NCBI GeneID	6742
NCBI Accession #	NP_001243439.1
NCBI GenBank Nucleotide #	NM_001256510.1
UniProt Accession #	Q04837
Molecular Weight	17,260 Da
NCBI Official Full Name	single-stranded DNA-binding protein, mitochondrial
NCBI Official Synonym Full Names	single-stranded DNA binding protein 1, mitochondrial
NCBI Official Symbol	SSBP1
NCBI Official Synonym Symbols	SSBP; mtSSB; Mt-SSB; SOSS-B1
NCBI Protein Information	single-stranded DNA-binding protein, mitochondrial; PWP1-interacting protein 17
UniProt Protein Name	Single-stranded DNA-binding protein, mitochondrial
UniProt Gene Name	SSBP1
UniProt Synonym Gene Names	SSBP; Mt-SSB; MtSSB
UniProt Entry Name	SSBP_HUMAN

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