

Rabbit STAT5A/B Polyclonal Antibody | anti-STAT5A/B antibody

Anti-STAT5A/B Antibody Picoband

CATALOG #	HOST	REACTIVITY	APPLICATIONS
AAA127034	Rabbit	Human, Mouse, Rat	ELISA, Flow Cytometry, Functional Assay, Immunofluorescence, Immunocytochemistry, Western Blot

PRODUCT SYNONYMS

STAT5A/B; Polyclonal Antibody; Anti-STAT5A/B Antibody Picoband; Serine/threonine-protein kinase AtPK1/AtPK6; 70 kDa ribosomal protein S6 kinase 1 antibody; KS6B1_HUMAN antibody; p70 alpha antibody; P70 beta 1 antibody; p70 ribosomal S6 kinase alpha antibody; p70 ribosomal S6 kinase beta 1 antibody; p70 S6 kinase alpha antibody; P70 S6 Kinase antibody; p70 S6 kinase alpha 1 antibody; p70 S6 kinase alpha 2 antibody; p70 S6K antibody; p70 S6K-alpha antibody; p70 S6KA antibody; p70(S6K) alpha antibody; p70(S6K)-alpha antibody; p70-alpha antibody; p70-S6K 1 antibody; p70-S6K antibody; P70S6K antibody; P70S6K1 antibody; p70S6Kb antibody; PS6K antibody; Ribosomal protein S6 kinase 70kDa polypeptide 1 antibody; Ribosomal protein S6 kinase beta 1 antibody; Ribosomal protein S6 kinase beta-1 antibody; Ribosomal protein S6 kinase I antibody; RPS6KB1 antibody; S6K antibody; S6K-beta-1 antibody; S6K1 antibody; Serine/threonine kinase 14 alpha antibody; Serine/threonine-protein kinase 14A antibody; STK14A antibody; anti-STAT5A/B antibody

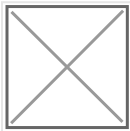
PRODUCT SPECIFICATIONS

Host	Rabbit
Reactivity	Human, Mouse, Rat
Clonality	Polyclonal
Isotype	IgG
Specificity	Expressed in all tissues.
Purity/Purification	Immunogen affinity purified.
Form/Format	Lyophilized. Each vial contains 4 mg Trehalose, 0.9 mg NaCl, 0.2 mg Na2HPO4.
Applicable Applications for anti-STAT5A/B antibody	ELISA, FCM/FACS (Flow Cytometry), IF (Immunofluorescence), ICC (Immunocytochemistry), WB (Western Blot)
Immunogen	E coli-derived human STAT5A/B recombinant protein (Position: K359-R790). Human STAT5A/B shares 95.8% and 95.6% amino acid (aa) sequence identity with mouse and rat STAT5A/B, respectively.
Subcellular Localization	Cytoplasm, Nucleus
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	Downstream effector of TOR signaling pathway involved in osmotic stress response. Could be involved in the control of plant growth and development. Phosphorylates the ribosomal proteins P14, P16 and S6. Functions as a repressor of cell proliferation and required for maintenance of chromosome stability and ploidy levels through the RBR1-E2F pathway.
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/FACS (Flow Cytometry)

Figure 3. Flow Cytometry analysis of A431 cells using anti-STAT5A/B antibody (AAA127034).Overlay histogram showing A431 cells stained with AAA127034 (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-STAT5A/B Antibody (AAA127034, 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 (Red line) was also used as a control.



WB (Western Blot)

Figure 1. Western blot analysis of STAT5A/B using anti-STAT5A/B antibody (AAA127034).Electrophoresis was performed on a 5-20% SDS-PAGE gel at 70V (Stacking gel)/90V (Resolving gel) for 2-3 hours. The sample well of each lane was loaded with 30 ug of sample under reducing conditions.Lane 1: human Hela whole cell lysates,Lane 2: human HepG2 whole cell lysates,Lane 3: human K562 whole cell lysates,Lane 4: human A431 whole cell lysates,Lane 5: rat PC-12 whole cell lysates,Lane 6: mouse thymus tissue 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-STAT5A/B antigen affinity purified polyclonal antibody (#AAA127034) at 0.5ug/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 STAT5A/B at approximately 90-95 kDa. The expected band size for STAT5A/B is at 91 kDa.



IF (Immunofluorescence)

Figure 2. IF analysis of STAT5A/B using anti-STAT5A/B antibody (AAA127034) and anti-Beta Tubulin antibody (M01857-3).STAT5A/B was detected in immunocytochemical section of HELA cell. Enzyme antigen retrieval was performed using IHC enzyme antigen retrieval reagent for 15 mins. The cells were blocked with 10% goat serum. And then incubated with 5ug/mL rabbit anti-STAT5A/B Antibody (AAA127034) and mouse anti-Beta Tubulin antibody (M01857-3) overnight at 4 degree C. Cy3 Conjugated Goat Anti-Rabbit IgG (BA1032) and DyLight488 Conjugated Goat Anti-Mouse IgG (BA1126) were used as secondary antibody at 1:500 dilution and incubated for 30 minutes at 37 degree C. Visualize using a fluorescence microscope and filter sets appropriate for the label used.

ADDITIONAL INFORMATION

Related Product Information for anti-STAT5A/B 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-STAT5A/B antibody	Primary Antibodies; Signal Transduction; Signaling Pathway; Small G Proteins
References	1. Ambrosio, R., Fimiani, G., Monfregola, J., Sanzari, E., De Felice, N., Salerno, M. C., Pignata, C., D'Urso, M., Ursini, M. V. The structure of human STAT5A and STAT5B genes reveals two regions of nearly identical sequence and an alternative tissue specific STAT5B promoter. Gene 285: 311-318, 2002. 2. Boucheron, C., Dumon, S., Santos, S. C. R., Moriggl, R., Hennighausen, L., Gisselbrecht, S., Gouilleux, F. A single amino acid in the DNA binding regions of STAT5A and STAT5B confers distinct binding specificities. J. Biol. Chem. 273: 33936-33941, 1998. 3. Chan, L. N., Murakami, M. A., Robinson, M. E., Caeser, R., Sadras, T., Lee, J., Cosgun, K. N., Kume, K., Khairnar, V., Xiao, G., Ahmed, M. A., Aghania, E., and 17 others. Signalling input from divergent pathways subverts B cell transformation. Nature 583: 845-851, 2020.

NCBI AND UNIPROT INFORMATION

NCBI GI #	21618342
NCBI GeneID	6776
NCBI Accession #	NP_003143.2
NCBI GenBank Nucleotide #	NM_003152.3

UniProt Accession #	P42229 ; P51692
Molecular Weight	90,647 Da
NCBI Official Full Name	signal transducer and activator of transcription 5A
NCBI Official Synonym Full Names	signal transducer and activator of transcription 5A
NCBI Official Symbol	STAT5A
NCBI Official Synonym Symbols	MGF; STAT5
NCBI Protein Information	signal transducer and activator of transcription 5A
UniProt Protein Name	Signal transducer and activator of transcription 5A
UniProt Gene Name	STAT5A
UniProt Synonym Gene Names	STAT5
UniProt Entry Name	STA5A_HUMAN

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Online datasheet: <https://stage.aaabiotech.com/polyclonal/stat5a-b-antibody-flow-cytometry-immunofluorescence-immunocytochemistry-western-blot-elisa/127034>