

Rabbit anti-Human SA1/STAG1 Polyclonal Antibody | anti-SA1/STAG1 antibody

Anti-SA1/STAG1 Antibody Picoband

CATALOG #	HOST	REACTIVITY	APPLICATIONS
AAA127375	Rabbit	Human	ELISA, Flow Cytometry, Functional Assay, Immunofluorescence, Immunocytochemistry, Western Blot

PRODUCT SYNONYMS

SA1/STAG1; Polyclonal Antibody; Anti-SA1/STAG1 Antibody Picoband; mediator complex subunit 4; Mediator of RNA polymerase II transcription subunit 4; Activator-recruited cofactor 36 kDa component; ARC36; Mediator complex subunit 4; TRAP/SMCC/PC2 subunit p36 subunit; Vitamin D3 receptor-interacting protein complex 36 kDa component; DRIP36; MED4; VDRIP; HSPC126; anti-SA1/STAG1 antibody

PRODUCT SPECIFICATIONS

Host	Rabbit
Reactivity	Human
Clonality	Polyclonal
Isotype	Rabbit IgG
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-SA1/STAG1 antibody	ELISA, FCM/FACS (Flow Cytometry), IF (Immunofluorescence), ICC (Immunocytochemistry), WB (Western Blot)
Immunogen	E coli-derived human SA1/STAG1 recombinant protein (Position: Q748-L1224).
Subcellular Localization	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	Component of the Mediator complex, a coactivator involved in the regulated transcription of nearly all RNA polymerase II-dependent genes. Mediator functions as a bridge to convey information from gene-specific regulatory proteins to the basal RNA polymerase II transcription machinery. Mediator is recruited to promoters by interactions with regulatory proteins and serves as a scaffold for the assembly of a functional preinitiation complex with RNA polymerase II and the general transcription factors.
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 U937 cells using anti-SA1/STAG1 antibody (AAA127375). Overlay histogram showing U937 cells stained with AAA127375 (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-SA1/STAG1 Antibody (AAA127375, 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 2. IF analysis of SA1/STAG1 using anti-SA1/STAG1 antibody (AAA127375) and anti-Tubulin Alpha antibody (M03989-3). SA1/STAG1 was detected in immunocytochemical section of T47D 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-SA1/STAG1 Antibody (AAA127375) and mouse anti-Tubulin Alpha antibody (M03989-3) 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.



WB (Western Blot)

Figure 1. Western blot analysis of SA1/STAG1 using anti-SA1/STAG1 antibody (AAA127375). 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 HEL whole cell lysates, Lane 2: human Hela 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-SA1/STAG1 antigen affinity purified polyclonal antibody (#AAA127375) 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 SA1/STAG1 at approximately 155 kDa. The expected band size for SA1/STAG1 is at 144 kDa.

ADDITIONAL INFORMATION

Related Product Information for anti-SA1/STAG1 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-SA1/STAG1 antibody	Primary Antibodies; Epigenetics and Nuclear Signaling; Mediator Complex; Pol II Transcription; Polymerase Associated Factors; Transcription
References	1. Carramolino, L., Lee, B. C., Zaballos, A., Peled, A., Barthelemy, I., Shav-Tal, Y., Prieto, I., Carmi, P., Gothelf, Y., Gonzalez de Buitrago, G., Aracil, M., Marquez, G., Barbero, J. L., Zipori, D. SA-1, a nuclear protein encoded by one member of a novel gene family: molecular cloning and detection in hemopoietic organs. Gene 195: 151-159, 1997. Note: Erratum: Gene 206: 283 only, 1998. 2. Davidson, I. F., Bauer, B., Goetz, D., Tang, W., Wutz, G., Peters, J. M. DNA loop extrusion by human cohesin. Science 366: 1338-1345, 2019. 3. Lehalle, D., Mosca-Boidron, A.-L., Begtrup, A., Boute-Benejean, O., Charles, P., Cho, M. T., Clarkson, A., Devinsky, O., Duffourd, Y., Duplomb-Jego, L., Gerard, B., Jacquette, A., and 25 others. STAG1 mutations cause a novel cohesinopathy characterised by unspecific syndromic intellectual disability. J. Med. Genet. 54: 479-488, 2017.

NCBI AND UNIPROT INFORMATION

NCBI GI #	209572720
NCBI GeneID	10274
UniProt Accession #	Q8WVM7; O00539; Q6P275
Molecular Weight	1258
NCBI Official Full Name	Cohesin subunit SA-1

NCBI Official Synonym Full Names	stromal antigen 1
NCBI Official Symbol	STAG1
NCBI Official Synonym Symbols	SA1; SCC3A
NCBI Protein Information	cohesin subunit SA-1; SCC3 homolog 1; nuclear protein stromal antigen 1
UniProt Protein Name	Cohesin subunit SA-1
UniProt Gene Name	STAG1
UniProt Synonym Gene Names	SA1
UniProt Entry Name	STAG1_HUMAN

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.

AAA Biotech | Tel: +1 (619) 604-9440 | Fax: +1 (619) 604-9441 | contact@aaabiotech.com
Online datasheet: <https://stage.aaabiotech.com/polyclonal/sa1-stag1-antibody-flow-cytometry-immunofluorescence-immunocytochemistry-western-blot-elisa/127375>