

Rabbit SPAG7 Polyclonal Antibody | anti-SPAG7 antibody

Anti-SPAG7 Antibody Picoband

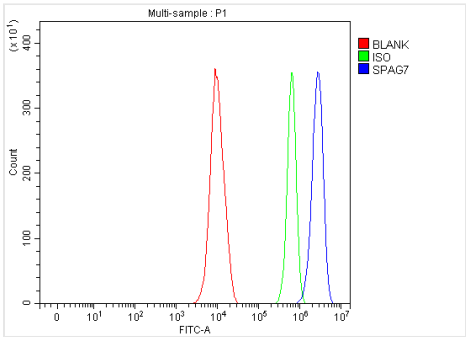
CATALOG #	HOST	REACTIVITY	APPLICATIONS
AAA127848	Rabbit	Human, Mouse, Rat	ELISA, Flow Cytometry, Functional Assay, Immunofluorescence, Immunocytochemistry, Western Blot

PRODUCT SYNONYMS

SPAG7; Polyclonal Antibody; Anti-SPAG7 Antibody Picoband; DAP3 binding cell death enhancer 1; coiled-coil domain containing 36; Interactor of HORMAD1 protein 1; Cancer/testis antigen 74; CT74; Coiled-coil domain-containing protein 36; CCDC36; IHO1; anti-SPAG7 antibody

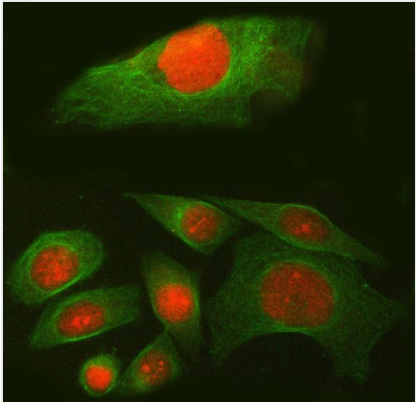
PRODUCT SPECIFICATIONS

Host	Rabbit
Reactivity	Human, Mouse, Rat
Clonality	Polyclonal
Isotype	Rabbit IgG
Specificity	Detected in liver, skeletal muscle, kidney, pancreas, spleen, thyroid, testis, ovary, small intestine and colon.
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-SPAG7 antibody	ELISA, FCM/FACS (Flow Cytometry), IF (Immunofluorescence), ICC (Immunocytochemistry), WB (Western Blot)
Immunogen	E coli-derived human SPAG7 recombinant protein (Position: M1-D199).
Subcellular Localization	Chromosome
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	Required for DNA double-strand breaks (DSBs) formation in unsynapsed regions during meiotic recombination. Probably acts by forming a complex with MEI4 and REC114, which activates DSBs formation in unsynapsed regions, an essential step to ensure completion of synapsis. Not required for HORMAD1 functions in pairing-independent synaptonemal complex formation, ATR recruitment to unsynapsed axes, meiotic silencing of unsynapsed chromatin (MSUC) or meiotic surveillance.
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.



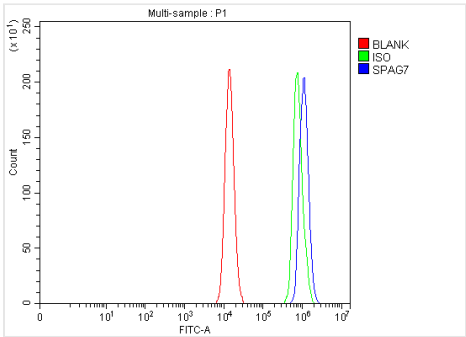
FCM/FACS (Flow Cytometry)

Figure 4. Flow Cytometry analysis of PC-3 cells using anti-SPAG7 antibody (AAA127848).Overlay histogram showing PC-3 cells stained with AAA127848 (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-SPAG7 Antibody (AAA127848, 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.



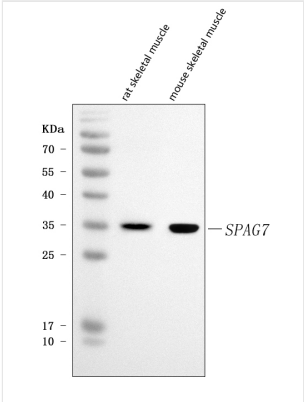
IF (Immunofluorescence)

Figure 2. IF analysis of SPAG7 using anti-SPAG7 antibody (AAA127848) and anti-Tubulin Alpha antibody (M03989-3).SPAG7 was detected in immunocytochemical section of SiHa 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-SPAG7 Antibody (AAA127848) 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.



FCM/FACS (Flow Cytometry)

Figure 3. Flow Cytometry analysis of HCT116 cells using anti-SPAG7 antibody (AAA127848).Overlay histogram showing HCT116 cells stained with AAA127848 (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-SPAG7 Antibody (AAA127848, 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.



WB (Western Blot)

Figure 1. Western blot analysis of SPAG7 using anti-SPAG7 antibody (AAA127848).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: rat skeletal muscle tissue lysates,Lane 2: mouse skeletal muscle 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-SPAG7 antigen affinity purified polyclonal antibody (#AAA127848) 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 SPAG7 at approximately 35 kDa. The expected band size for SPAG7 is at 26 kDa.

ADDITIONAL INFORMATION

Related Product Information for anti-SPAG7 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-SPAG7 antibody	Primary Antibodies; Cell Biology

References	1. Mao, M., Fu, G., Wu, J.-S., Zhang, Q.-H., Zhou, J., Kan, L.-X., Huang, Q.-H., He, K.-L., Gu, B.-W., Han, Z.-G., Shen, Y., Gu, J., Yu, Y.-P., Xu, S.-H., Wang, Y.-X., Chen, S.-J., Chen, Z. Identification of genes expressed in human CD34+ hematopoietic stem/progenitor cells by expressed sequence tags and efficient full-length cDNA cloning. Proc. Nat. Acad. Sci. 95: 8175-8180, 1998.
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NCBI AND UNIPROT INFORMATION

NCBI GI #	118344454
NCBI GeneID	9552
NCBI Accession #	NP_004881.2
NCBI GenBank Nucleotide #	NM_004890.2
UniProt Accession #	O75391; Q96EU5
Molecular Weight	26,034 Da
NCBI Official Full Name	sperm-associated antigen 7
NCBI Official Synonym Full Names	sperm associated antigen 7
NCBI Official Symbol	SPAG7
NCBI Official Synonym Symbols	ACRP; FSA-1
NCBI Protein Information	sperm-associated antigen 7
UniProt Protein Name	Sperm-associated antigen 7
UniProt Gene Name	SPAG7
UniProt Entry Name	SPAG7_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.