

Rabbit SPATA7 Polyclonal Antibody | anti-SPATA7 antibody

Anti-SPATA7 Antibody Picoband

CATALOG #	HOST	REACTIVITY	APPLICATIONS
AAA127514	Rabbit	Human, Mouse, Rat	ELISA, Flow Cytometry, Functional Assay, Western Blot

PRODUCT SYNONYMS

SPATA7; Polyclonal Antibody; Anti-SPATA7 Antibody Picoband; SET domain bifurcated histone lysine methyltransferase 2; Histone-lysine N-methyltransferase SETDB2; Chronic lymphocytic leukemia deletion region gene 8 protein; Lysine N-methyltransferase 1F; SET domain bifurcated 2; SETDB2; C13orf4; CLLD8; KMT1F; anti-SPATA7 antibody

PRODUCT SPECIFICATIONS

Host	Rabbit
Reactivity	Human, Mouse, Rat
Clonality	Polyclonal
Isotype	Rabbit IgG
Specificity	Highly Expressed in reproductive organs, such as testis, ovary and prostate.
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-SPATA7 antibody	ELISA, FCM/FACS (Flow Cytometry), WB (Western Blot)
Immunogen	E coli-derived human SPATA7 recombinant protein (Position: R5-V599).
Subcellular Localization	Nucleus. 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	Histone methyltransferase involved in left-right axis specification in early development and mitosis. Specifically trimethylates 'Lys-9' of histone H3 (H3K9me3). H3K9me3 is a specific tag for epigenetic transcriptional repression that recruits HP1 (CBX1, CBX3 and/or CBX5) proteins to methylated histones. Contributes to H3K9me3 in both the interspersed repetitive elements and centromere-associated repeats. Plays a role in chromosome condensation and segregation during mitosis.
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.

IMAGES



FCM/FACS (Flow Cytometry)

Figure 2. Flow Cytometry analysis of HepG2 cells using anti-SPATA7 antibody (AAA127514). Overlay histogram showing HepG2 cells stained with AAA127514 (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-SPATA7 Antibody (AAA127514, 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 SPATA7 using anti-SPATA7 antibody (AAA127514). 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 PC-3 whole cell lysates, Lane 2: rat PC-12 whole cell lysates, Lane 3: mouse testis tissue lysates, Lane 4: mouse RAW264.7 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-SPATA7 antigen affinity purified polyclonal antibody (#AAA127514) 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 SPATA7 at approximately 68 kDa. The expected band size for SPATA7 is at 68 kDa.

ADDITIONAL INFORMATION

Related Product Information for anti-SPATA7 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-SPATA7 antibody	Primary Antibodies; Immune System Diseases; Immunology; Protein Trafficking; Signal Transduction; Signaling Pathway
References	1. Avila-Fernandez, A., Corton, M., Lopez-Molina, M. I., Martin-Garrido, E., Cantalapiedra, D., Fernandez-Sanchez, R., Blanco-Kelly, F., Riveiro-Alvarez, R., Tatu, S. D., Trujillo-Tiebas, M. J., Garcia-Sandoval, B., Ayuso, C., Cremers, F. P. M. Late onset retinitis pigmentosa. Ophthalmology 118: 2523-2524, 2011. 2. Eblimit, A., Agrawal, S. A., Thomas, K., Anastassov, I. A., Abulikemu, T., Moayed, Y., Mardon, G., Chen, R. Conditional loss of Spata7 in photoreceptors causes progressive retinal degeneration in mice. Exp. Eye Res. 166: 120-130, 2018. Note: Erratum: Exp Eye Res. 171: 119, 2018. 3. Eblimit, A., Nguyen, T.-M. T., Chen, Y., Esteve-Rudd, J., Zhong, H., Letteboer, S., Van Reeuwijk, J., Simons, D. L., Ding, Q., Wu, K. M., Li, Y., Van Beersum, S., and 10 others. Spata7 is a retinal ciliopathy gene critical for correct RPGRIP1 localization and protein trafficking in the retina. Hum. Molec. Genet. 24: 1584-601, 2015.

NCBI AND UNIPROT INFORMATION

NCBI GI #	94536850
NCBI GeneID	55812
NCBI Accession #	NP_001035518.1
NCBI GenBank Nucleotide #	NM_001040428.3
UniProt Accession #	Q9P0W8; Q5BK Y5; Q8WX30; Q96HF3; Q9H0X0; Q9P0W7
Molecular Weight	67,719 Da
NCBI Official Full Name	spermatogenesis-associated protein 7 isoform 2
NCBI Official Synonym Full Names	spermatogenesis associated 7
NCBI Official Symbol	SPATA7
NCBI Official Synonym Symbols	HSD3; LCA3; HSD-3.1; HEL-S-296
NCBI Protein Information	spermatogenesis-associated protein 7; epididymis secretory protein Li 296; spermatogenesis-associated protein HSD3
UniProt Protein Name	Spermatogenesis-associated protein 7

UniProt Gene Name	SPATA7
UniProt Synonym Gene Names	HSD3
UniProt Entry Name	SPAT7_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.

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Online datasheet: <https://stage.aaabiotech.com/polyclonal/spata7-antibody-flow-cytometry-western-blot-elisa/127514>