

Anti-SMC6L1 Antibody Picoband™

Catalog Number: A01554-1

About SMC6

Structural maintenance of chromosomes protein 6, also known as SMC6L1, is a protein that in humans is encoded by the SMC6 gene. It is involved in the Alternative lengthening of telomeres cancer mechanism. The International Radiation Hybrid Mapping Consortium mapped the SMC6L1 gene to chromosome 2.

Overview

Product Name	Anti-SMC6L1 Antibody Picoband™
Reactive Species	Human, Mouse, Rat
Description	Boster Bio Anti-SMC6L1 Antibody Picoband™ catalog # A01554-1. Tested in ELISA, Flow Cytometry, IF, IHC, IHC-F, ICC, WB applications. This antibody reacts with Human, Mouse, Rat.
Application	ELISA, Flow Cytometry, IF, IHC, IHC-F, ICC, WB
Clonality	Polyclonal
Formulation	Each vial contains 4mg Trehalose, 0.9mg NaCl, 0.2mg Na ₂ HPO ₄ , 0.05mg NaN ₃ .
Storage Instructions	Store at -20°C for one year from date of receipt. After reconstitution, at 4°C for one month. It can also be aliquotted and stored frozen at -20°C for six months. Avoid repeated freeze-thaw cycles.
Host	Rabbit
Uniprot ID	Q96SB8

Technical Details

Immunogen	E. coli-derived human SMC6L1 recombinant protein (Position: D205-E443).
Predicted Reactive Species	Human
Recommended Detection Systems	Boster recommends Enhanced Chemiluminescent Kit with anti-Rabbit IgG (EK1002) for Western blot, and HRP Conjugated anti-Rabbit IgG Super Vision Assay Kit (SV0002-1) for IHC(P), IHC(F) and ICC.
Cross Reactivity	No cross-reactivity with other proteins.
Isotype	Rabbit IgG
Form	Lyophilized
Concentration	Adding 0.2 ml of distilled water will yield a concentration of 500 ug/ml.
Suggested Dilutions	Dilute the sample so that the expected range of concentrations fall within the detection range of this

kit.

If the expected range of concentration is unknown, a pilot test should be conducted to decide the optimal dilution ratio for your samples.

Some PubMed article(s) citing the expression level of this target are as follows:

Boster Bio's internal QC testing used:

Western blot, 0.1-0.5ug/ml

Immunohistochemistry (Paraffin-embedded Section), 0.5-1ug/ml

Immunohistochemistry (Frozen Section), 0.5-1ug/ml

Immunocytochemistry/Immunofluorescence, 2ug/ml

Flow Cytometry, 1-3ug/ 1×10^6 cells

Direct ELISA, 0.1-0.5ug/ml

Anti-SMC6L1 Antibody Picoband™ (A01554-1) Images

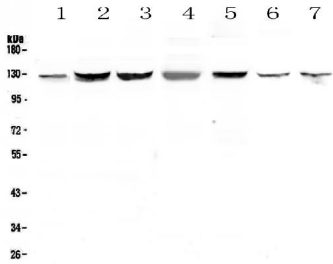


Figure 1. Western blot analysis of SMC6L1 using anti-SMC6L1 antibody (A01554-1). Electrophoresis was performed on a 5-20% SDS-PAGE gel at 70V (Stacking gel) / 90V (Resolving gel) for 2-3 hours. The sample well of each lane was loaded with 50ug of sample under reducing conditions.

Lane 1: human Hela whole cell lysates,
Lane 2: human HepG2 whole cell lysates,
Lane 3: human PANC-1 whole cell lysates,
Lane 4: human SK-OV-3 whole cell lysates,
Lane 5: human COLO-320 whole cell lysates,
Lane 6: rat testis tissue lysates,
Lane 7: mouse testis tissue lysates.

After Electrophoresis, proteins were transferred to a Nitrocellulose membrane at 150mA 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-SMC6L1 antigen affinity purified polyclonal antibody (Catalog # A01554-1) at 0.5 ug/mL overnight at 4°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 1:10000 for 1.5 hour at RT. The signal is developed using an Enhanced Chemiluminescent detection (ECL) kit (Catalog # EK1002) with Tanon 5200 system. A specific band was detected for SMC6L1 at approximately 126KD. The expected band size for SMC6L1 is at 126KD.

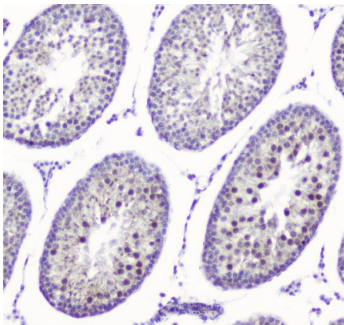


Figure 2. IHC analysis of SMC6L1 using anti-SMC6L1 antibody (A01554-1).

SMC6L1 was detected in paraffin-embedded section of rat testis tissue. Heat mediated antigen retrieval was performed in citrate buffer (pH6, epitope retrieval solution) for 20 mins. The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 1ugug/ml rabbit anti-SMC6L1 Antibody (A01554-1) overnight at 4°C. Biotinylated goat anti-rabbit IgG was used as secondary antibody and incubated for 30 minutes at 37°C. The tissue section was developed using Streptavidin-Biotin-Complex (SABC)(Catalog # SA1022) with DAB as the chromogen.

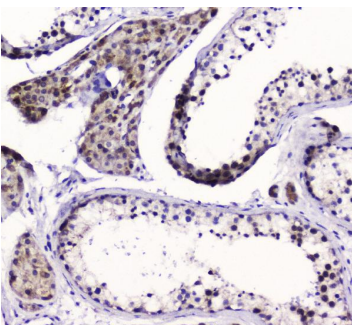


Figure 3. IHC analysis of SMC6L1 using anti-SMC6L1 antibody (A01554-1).

SMC6L1 was detected in paraffin-embedded section of human testis tissue. Heat mediated antigen retrieval was performed in citrate buffer (pH6, epitope retrieval solution) for 20 mins. The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 1ugug/ml rabbit anti-SMC6L1 Antibody (A01554-1) overnight at 4°C. Biotinylated goat anti-rabbit IgG was used as secondary antibody and incubated for 30 minutes at 37°C. The tissue section was developed using Streptavidin-Biotin-Complex (SABC)(Catalog # SA1022) with DAB as the chromogen.

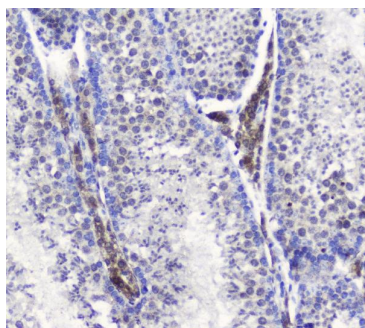


Figure 4. IHC analysis of SMC6L1 using anti-SMC6L1 antibody (A01554-1).

SMC6L1 was detected in paraffin-embedded section of mouse testis tissue. Heat mediated antigen retrieval was performed in citrate buffer (pH6, epitope retrieval solution) for 20 mins. The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 1ugug/ml rabbit anti-SMC6L1 Antibody (A01554-1) overnight at 4°C. Biotinylated goat anti-rabbit IgG was used as secondary antibody and incubated for 30 minutes at 37°C. The tissue section was developed using Streptavidin-Biotin-Complex (SABC)(Catalog # SA1022) with DAB as the chromogen.

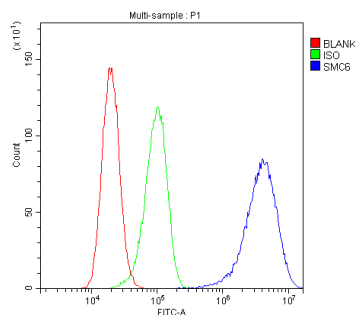


Figure 5. Flow Cytometry analysis of A431 cells using anti-SMC6L1 antibody (A01554-1).

Overlay histogram showing A431 cells stained with A01554-1 (Blue line). The cells were blocked with 10% normal goat serum. And then incubated with rabbit anti-SMC6L1 Antibody A01554-1, 1ug/1x10⁶ cells) for 30 min at 20°C. DyLight®488 conjugated goat anti-rabbit IgG (BA1127, 5-10ug/1x10⁶ cells) was used as secondary antibody for 30 minutes at 20°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.

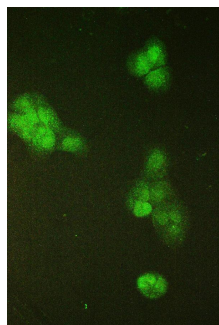


Figure 6. IF analysis of SMC6L1 using anti-SMC6L1 antibody (A01554-1).

SMC6L1 was detected in immunocytochemical section of A431 cell. Enzyme antigen retrieval was performed using IHC enzyme antigen retrieval reagent (AR0022) for 15 mins. The cells were blocked with 10% goat serum. And then incubated with 2ug/mL rabbit anti-SMC6L1 Antibody (A01554-1) overnight at 4°C. DyLight®488 Conjugated Goat Anti-Rabbit IgG (BA1127) was used as secondary antibody at 1:100 dilution and incubated for 30 minutes at 37°C. Visualize using a fluorescence microscope and filter sets appropriate for the label used.

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Anti-SMC6L1 Antibody TM