

## Anti-S100 alpha 6/S100A6 Antibody Picoband®

Catalog Number: PB9676

### About S100A6

S100 calcium-binding protein A6 (S100A6) is a protein that in humans is encoded by the S100A6 gene. The protein encoded by this gene is a member of the S100 family of proteins containing 2 EF-hand calcium-binding motifs. S100 proteins are localized in the cytoplasm and/or nucleus of a wide range of cells, and involved in the regulation of a number of cellular processes such as cell cycle progression and differentiation. And S100 genes include at least 13 members which are located as a cluster on chromosome 1q21. This protein may function in stimulation of Ca<sup>2+</sup>-dependent insulin release, stimulation of prolactin secretion, and exocytosis. Chromosomal rearrangements and altered expression of this gene have been implicated in melanoma.

### Overview

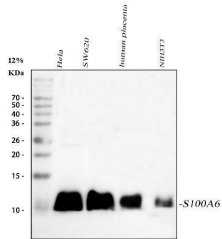
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|----------------------|--|
| Product Name         | Anti-S100 alpha 6/S100A6 Antibody Picoband®  |
| Reactive Species     | Human, Mouse, Rat  |
| Description          | Boster Bio Anti-S100 alpha 6/S100A6 Antibody Picoband® catalog # PB9676. Tested in Flow Cytometry, IF, IHC, ICC, WB applications. This antibody reacts with Human, Mouse, Rat. 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.                   |
| Application          | Flow Cytometry, IF, IHC, ICC, WB   |
| Clonality            | Polyclonal   |
| Formulation          | Each vial contains antibody formulated with stabilizing components, 0.9 mg NaCl, 0.2 mg Na <sub>2</sub> HPO <sub>4</sub> , and 0.05 mg NaN <sub>3</sub> .<br>*This antibody is supplied in a stabilized formulation.<br>Compatibility with conjugation reactions depends on the chemistry of the conjugation method used. For conjugation methods that are not compatible with the stabilizing components present in this formulation, a carrier-free antibody format is required. |
| 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           | P06703   |

### Technical Details

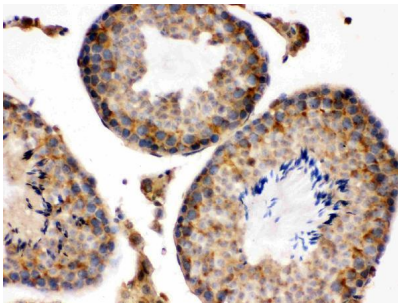
|           |  |
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| Immunogen | E.coli-derived human S100 alpha 6 recombinant protein (Position: M1-G90). Human S100 alpha 6 shares 96.6% and 95.5% amino acid (aa) sequence identity with mouse and rat S100 alpha 6, respectively. |
|-----------|--|

|                               |  |
|-------------------------------|--|
| 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) 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.  |
| Purification                  | Immunogen affinity purified.   |
| Suggested Dilutions           | Western blot, 0.1-0.5ug/ml, Human, Mouse<br>Immunohistochemistry (Paraffin-embedded Section), 0.5-1ug/ml, Human, Mouse, Rat<br>Immunocytochemistry/Immunofluorescence, 5ug/ml, Human<br>Flow Cytometry (Fixed), 1-3ug/1x10 <sup>6</sup> cells, Human |

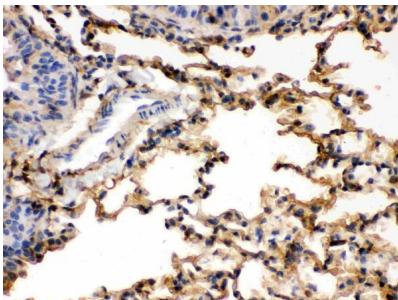
## Anti-S100 alpha 6/S100A6 Antibody Picoband® (PB9676) Images



Western blot analysis of S100A6 using anti-S100A6 antibody (PB9676). 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 SW620 whole cell lysates, Lane 3: human placenta tissue lysates, Lane 4: mouse NIH/3T3 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-S100A6 antigen affinity purified polyclonal antibody (Catalog # PB9676) 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 1:5000 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 S100A6 at approximately 10 kDa. The expected band size for S100A6 is at 10 kDa.

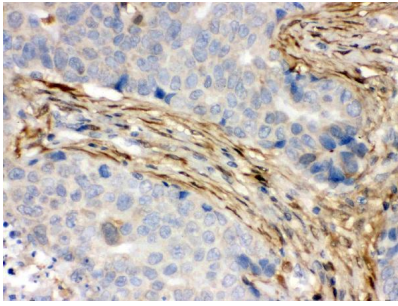


IHC analysis of S100A6 using anti-S100A6 antibody (PB9676). S100A6 was detected in paraffin-embedded section of Mouse Testis tissues. Heat mediated antigen retrieval was performed in citrate buffer (pH6, epitope retrieval solution) for 20 mins. The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 1ug/ml rabbit anti-S100A6 Antibody (PB9676) 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.

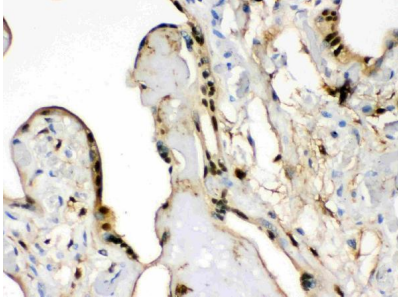


IHC analysis of S100A6 using anti-S100A6 antibody (PB9676). S100A6 was detected in paraffin-embedded section of Rat Lung tissues. Heat mediated antigen retrieval was performed in citrate buffer (pH6, epitope retrieval solution) for 20 mins. The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 1ug/ml rabbit anti-S100A6 Antibody (PB9676) 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.

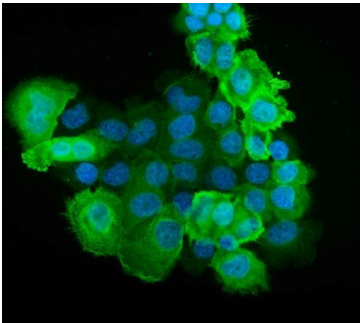
IHC analysis of S100A6 using anti-S100A6 antibody (PB9676). S100A6 was detected in paraffin-embedded section of Human Mammary Cancer tissues. Heat mediated antigen retrieval was performed in citrate buffer (pH6, epitope retrieval solution) for 20 mins. The tissue section



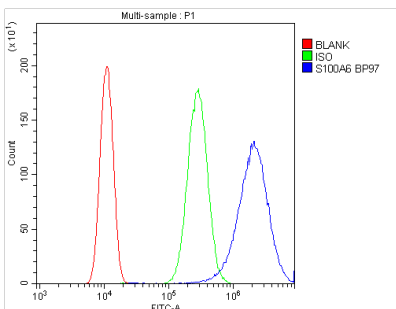
was blocked with 10% goat serum. The tissue section was then incubated with 1ug/ml rabbit anti-S100A6 Antibody (PB9676) overnight at 4°C. Biotinylated goat anti-rabbit IgG was used as secondary antibody and incubated for 30 minutes at 37°C. The tissue section was developed using Streptavidin-Biotin-Complex (SABC)(Catalog # SA1022) with DAB as the chromogen.



IHC analysis of S100A6 using anti-S100A6 antibody (PB9676). S100A6 was detected in paraffin-embedded section of Human Placenta tissues. 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 1ug/ml rabbit anti-S100A6 Antibody (PB9676) 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.

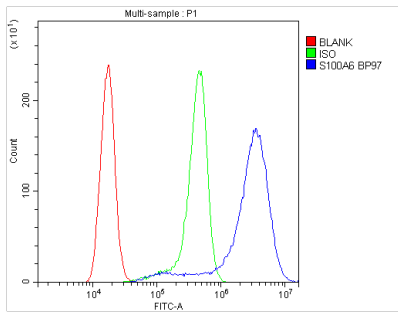


IF analysis of S100A6 using anti-S100A6 antibody (PB9677). S100A6 was detected in an immunocytochemical section of A431 cells. Enzyme antigen retrieval was performed using IHC enzyme antigen retrieval reagent (AR0022) for 15 mins. The cells were blocked with 10% goat serum. And then incubated with 5 ug/mL rabbit anti-S100A6 Antibody (PB9677) 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. The tissue section was developed using Phalloidin-iFluor 594 Conjugated. Visualize using a fluorescence microscope and filter sets appropriate for the label used.



Flow Cytometry analysis of SiHa cells using anti-S100A6 antibody (PB9676). Overlay histogram showing SiHa cells stained with PB9676 (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-S100A6 Antibody (PB9676, 1ug/1x10<sup>6</sup> cells) for 30 min at 20°C. DyLight®488 conjugated goat anti-rabbit IgG (BA1127, 5-10ug/1x10<sup>6</sup> cells) was used as secondary antibody for 30 minutes at 20°C. Isotype control antibody (Green line) was rabbit IgG (1ug/1x10<sup>6</sup>) used under the same conditions. Unlabelled sample without incubation with primary antibody and secondary antibody (Red line) was used as a blank control.

Flow Cytometry analysis of A431 cells using anti-S100A6 antibody (PB9676). Overlay histogram showing A431 cells stained with PB9676 (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-S100A6 Antibody (PB9676, 1 $\mu$ g/1x10<sup>6</sup> cells) for 30 min at 20°C. DyLight®488 conjugated goat anti-rabbit IgG (BA1127, 5-10 $\mu$ g/1x10<sup>6</sup> cells) was used as secondary antibody for 30 minutes at 20°C. Isotype control antibody (Green line) was rabbit IgG (1 $\mu$ g/1x10<sup>6</sup>) used under the same conditions. Unlabelled sample without incubation with primary antibody and secondary antibody (Red line) was used as a blank control.

## 1 Publications Citing This Product

1. PubMed ID: 31942470, Song WH, Baik J, Yang S, Choi EK, Park SM, Jeong CW. Animal model evaluation of a novel renal denervation system for future laparoscopic treatment of resistant hypertension. *Investig Clin Urol*. 2020 Jan; 61(1):107-113. doi:10.4111/icu.2020.61.1.107. Epub 2019 Dec 23

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