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antibody and ELISA experts

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# Anti-APLP1 Antibody Picoband™

**Catalog Number:** PB9476

## About APLP1

Amyloid-precursor-like protein 1 (APLP1) is a membrane-associated glycoprotein, whose gene is homologous to the APP gene, which has been shown to be involved in the pathogenesis of Alzheimer's disease. APLP1 is predominantly expressed in brain, particularly in the cerebral cortex postsynaptic density. The human gene has been mapped to chromosomal region 19q13.1. The gene is 11.8 kb long and contains 17 exons. APLP1 has been considered a candidate gene for CNF. All exon regions of the gene were amplified by the polymerase chain reaction and sequenced from DNA of CNF patients. No differences were observed between CNF patients and controls, suggesting that mutations in APLP1 are not involved in the etiology of CNF.

## Overview

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| Product Name | Anti-APLP1 Antibody Picoband™ |
| Reactive Species | Human, Mouse, Rat |
| Description | Boster Bio Anti-APLP1 Antibody Picoband™ catalog # PB9476. Tested in Flow Cytometry, IHC, ICC, WB applications. This antibody reacts with Human, Mouse, Rat. |
| Application | Flow Cytometry, IHC, ICC, WB |
| Clonality | Polyclonal |
| Formulation | Each vial contains 5mg BSA, 0.9mg NaCl, 0.2mg Na2HPO4, 0.05mg NaN3. |
| 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 | P51693 |

## Technical Details

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| Immunogen | A synthetic peptide corresponding to a sequence at the N-terminus of human APLP1, different from the related mouse sequence by three amino acids. |
| Predicted Reactive Species | Bovine |
| 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 |
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| Form | Lyophilized |
| Concentration | Adding 0.2 ml of distilled water will yield a concentration of 500 ug/ml. |
| Purification | Immunogen affinity purified. |
| Suggested Dilutions | Dilute the sample so that the expected range of concentrations fall within the detection range of this kit.<br>If the expected range of concentration is unknown, a pilot test should be conducted to decide the optimal dilution ratio for your samples.<br>Some PubMed article(s) citing the expression level of this target are as follows:<br>Boster Bio's internal QC testing used:<br>Immunohistochemistry (Paraffin-embedded Section), 0.5-1ug/ml, Mouse, Rat, Human, By Heat<br>Western blot, 0.1-0.5ug/ml, Human, Rat<br>Immunohistochemistry (Frozen Section), 0.5-1ug/ml, Human<br>Immunocytochemistry, 0.5-1ug/ml, Human<br>Flow Cytometry, 1-3ug/1x$10^6$ cells, Human |

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# Anti-APLP1 Antibody Picoband™ (PB9476) Images

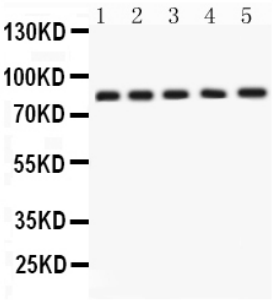


Figure 1. Western blot analysis of APLP1 using anti-APLP1 antibody (PB9476).
Electrophoresis was performed on a 5-20% SDS-PAGE gel at 70V (Stacking gel) / 90V (Resolving gel) for 2-3 hours. The sample well of each lane was loaded with 50ug of sample under reducing conditions.
Lane 1: Rat Brain Tissue Lysate,
Lane 2: Rat Testis Tissue Lysate,
Lane 3: SGC Whole Cell Lysate,
Lane 4: 22RV1 Whole Cell Lysate,
Lane 5: MCF-7 Whole Cell Lysate.
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-APLP1 antigen affinity purified polyclonal antibody (Catalog # PB9476) 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 APLP1 at approximately 85KD. The expected band size for APLP1 is at 72KD.

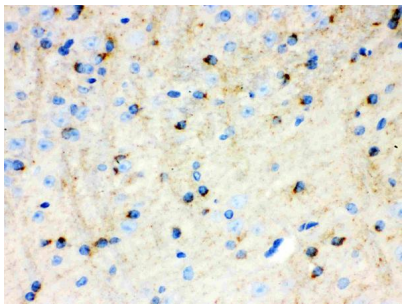

Figure 2. IHC analysis of APLP1 using anti-APLP1 antibody (PB9476).
APLP1 was detected in paraffin-embedded section of Mouse Brain Tissue. Heat mediated antigen retrieval was performed in citrate buffer (pH6, epitope retrieval solution) for 20 mins. The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 1ug/ml rabbit anti-APLP1 Antibody (PB9476) 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 Strepavidin-Biotin-Complex (SABC)(Catalog # SA1022) with DAB as the chromogen.

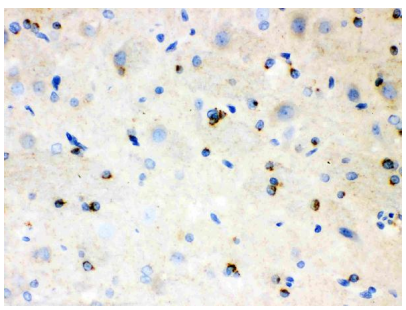

Figure 3. IHC analysis of APLP1 using anti-APLP1 antibody (PB9476).
APLP1 was detected in paraffin-embedded section of Rat Brain Tissue. Heat mediated antigen retrieval was performed in citrate buffer (pH6, epitope retrieval solution) for 20 mins. The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 1ug/ml rabbit anti-APLP1 Antibody (PB9476) 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 Strepavidin-Biotin-Complex (SABC)(Catalog # SA1022) with DAB as the chromogen.

Figure 4. Flow Cytometry analysis of SiHa cells using anti-

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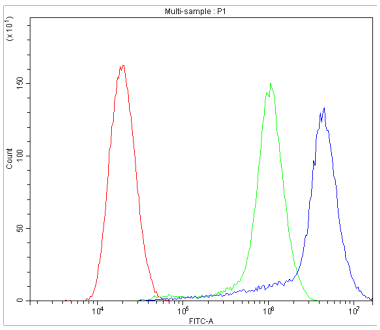


APLP1 antibody (PB9476).
Overlay histogram showing SiHa cells stained with PB9476 (Blue line).The cells were blocked with 10% normal goat serum. And then incubated with rabbit anti-APLP1 Antibody (PB9476,1ug/1x$10^6$ cells) for 30 min at 20°C. DyLight®488 conjugated goat anti-rabbit IgG (BA1127, 5-10ug/1x$10^6$ cells) was used as secondary antibody for 30 minutes at 20°C. Isotype control antibody (Green line) was rabbit IgG (1ug/1x$10^6$) used under the same conditions. Unlabelled sample (Red line) was also used as a control.



Anti-APLP1 Antibody ™