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antibody and ELISA experts

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# Anti-PCTAIRE1/CDK16 Antibody Picoband™

**Catalog Number:** A06102-1

## About CDK16

Cyclin-dependent kinase 16 is a protein that in humans is encoded by the CDK16 gene. This gene is mapped to Xp11.3. The protein encoded by this gene belongs to the cdc2/cdkx subfamily of the ser/thr family of protein kinases. It may play a role in signal transduction cascades in terminally differentiated cells; in exocytosis; and in transport of secretory cargo from the endoplasmic reticulum. This gene is thought to escape X inactivation. Alternative splicing results in multiple transcript variants encoding different isoforms.

## Overview

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| Product Name | Anti-PCTAIRE1/CDK16 Antibody Picoband™ |
| Reactive Species | Human, Mouse, Rat |
| Description | Boster Bio Anti-PCTAIRE1/CDK16 Antibody Picoband™ catalog # A06102-1. Tested in ELISA, Flow Cytometry, IHC, WB applications. This antibody reacts with Human, Mouse, Rat. |
| Application | ELISA, Flow Cytometry, IHC, WB |
| Clonality | Polyclonal |
| Formulation | Each vial contains 4mg Trehalose, 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 | Q00536 |

## Technical Details

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| Immunogen | E.coli-derived human PCTAIRE1/CDK16 recombinant protein (Position: N392-H443). |
| 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). |
| 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 | Dilute the sample so that the expected range of concentrations fall within the detection range of this |

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| | 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>Western blot, 0.25-0.5ug/ml, Human, Mouse, Rat<br>Immunohistochemistry (Paraffin-embedded Section), 0.5-1ug/ml, Human<br>Flow Cytometry, 1-3ug/1x$10^6$ cells, Human<br>Direct ELISA, 0.1-0.5ug/ml, Human |

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# Anti-PCTAIRE1/CDK16 Antibody Picoband™ (A06102-1) Images

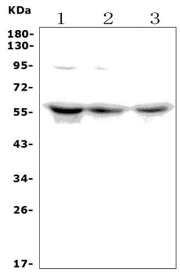


Figure 1. Western blot analysis of CDK16 using anti-CDK16 antibody (A06102-1).
Electrophoresis was performed on a 5-20% SDS-PAGE gel at 70V (Stacking gel) / 90V (Resolving gel) for 2-3 hours. The sample well of each lane was loaded with 50ug of sample under reducing conditions.
Lane 1: human Caco-2 whole cell lysates,
Lane 2: rat PC-12 whole cell lysates,
Lane 3: mouse NIH3T3 whole cell 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-CDK16 antigen affinity purified polyclonal antibody (Catalog # A06102-1) 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 1:5000 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 CDK16 at approximately 56KD. The expected band size for CDK16 is at 56KD.

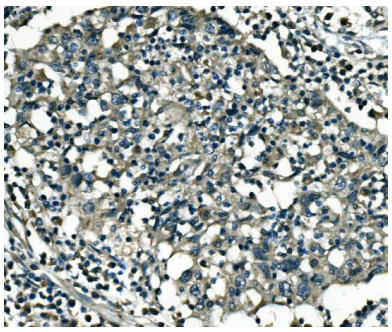

Figure 2. IHC analysis of CDK16 using anti-CDK16 antibody (A06102-1).
CDK16 was detected in paraffin-embedded section of human lung cancer tissue. Heat mediated antigen retrieval was performed in EDTA buffer (pH8.0, epitope retrieval solution). The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 1ug/ml rabbit anti-CDK16 Antibody (A06102-1) 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 Strepavidin-Biotin-Complex (SABC) (Catalog # SA1022) with DAB as the chromogen.

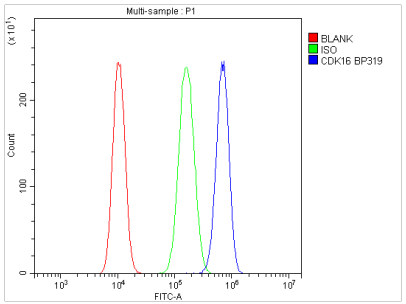


Figure 3. Flow Cytometry analysis of U20S cells using anti-CDK16 antibody (A06102-1).
Overlay histogram showing U20S cells stained with A06102-1 (Blue line).The cells were blocked with 10% normal goat serum. And then incubated with rabbit anti-CDK16 Antibody (A06102-1, 1ug/1x$10^6$ cells) for 30 min 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.

Figure 4. Flow Cytometry analysis of 293T cells using anti-CDK16 antibody (A06102-1).
Overlay histogram showing 293T cells stained with

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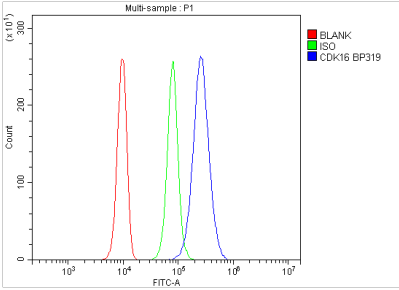


A06102-1 (Blue line).The cells were blocked with 10% normal goat serum. And then incubated with rabbit anti-CDK16 Antibody (A06102-1, 1ug/1x$10^6$ cells) for 30 min at 20°C. DyLight®488 conjugated goat anti-rabbit IgG (BA1127, 5-10ug/1x$10^6$ cells) was used as secondary antibody for 30 minutes at 20°C. 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-PCTAIRE1/CDK16 Antibody ™