

## Anti-Mitochondrial Pyruvate dehydrogenase kinase 1/PDK1 Antibody Picoband®

Catalog Number: A01268-1

### About PDK1

PDK1 (Pyruvate Dehydrogenase Kinase Isoenzyme 1), is an enzyme that in humans is encoded by the PDK1 gene. To find human PDKs, Gudi et al. (1995) used oligonucleotide primers to screen a human liver cDNA library by PCR. They identified and reported the deduced amino acid sequences of PDK1, PDK2, and PDK3. The human PDK1 gene encodes a protein with a predicted molecular mass of 49,244 Da that shares 93% identity with that of the rat PDK1 gene. Northern blot analysis showed that the PDK1 message was expressed predominantly in the heart.

### Overview

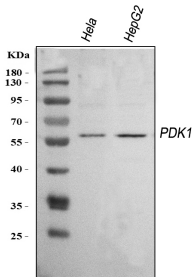
|                      |                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
|----------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Product Name         | Anti-Mitochondrial Pyruvate dehydrogenase kinase 1/PDK1 Antibody Picoband®                                                                                                                                                                                                                                                                                                                                                                                               |
| Reactive Species     | Human, Rat                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
| Description          | Boster Bio Anti-Mitochondrial Pyruvate dehydrogenase kinase 1/PDK1 Antibody Picoband® catalog # A01268-1. Tested in ELISA, IHC, WB applications. This antibody reacts with Human, 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          | ELISA, IHC, WB                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
| Clonality            | Polyclonal                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
| Formulation          | Each vial contains 4mg Trehalose, 0.9mg NaCl, 0.2mg Na <sub>2</sub> HPO <sub>4</sub> , 0.05mg NaN <sub>3</sub> .                                                                                                                                                                                                                                                                                                                                                         |
| 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           | Q15118                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |

### Technical Details

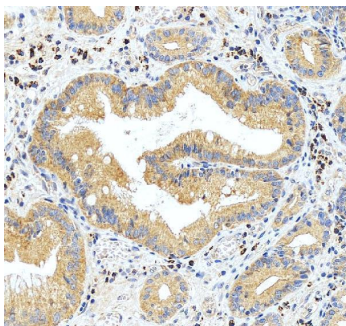
|                               |                                                                                                                                                                                  |
|-------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Immunogen                     | E. coli-derived human PDK1 recombinant protein (Position: V107-Y336).                                                                                                            |
| 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 | Western blot, 0.1-0.5ug/ml<br>Immunohistochemistry (Paraffin-embedded Section), 0.5-1ug/ml<br>ELISA, 0.1-0.5ug/ml |

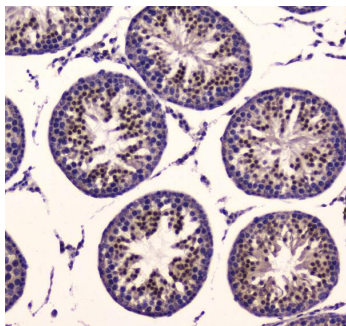
## Anti-Mitochondrial Pyruvate dehydrogenase kinase 1/PDK1 Antibody Picoband® (A01268-1) Images



Western blot analysis of PDK1 using anti-PDK1 antibody (A01268-1). 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 30 ug of sample under reducing conditions. Lane 1: human HeLa whole cell lysates, Lane 2: human HepG2 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-PDK1 antigen affinity purified polyclonal antibody (Catalog # A01268-1) 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 PDK1 at approximately 58 kDa. The expected band size for PDK1 is at 49 kDa.



IHC analysis of PDK1 using anti-PDK1 antibody (A01268-1). PDK1 was detected in a paraffin-embedded section of human stomach cancer tissue. Heat mediated antigen retrieval was performed in EDTA buffer (pH 8.0, epitope retrieval solution). The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 2 ug/ml rabbit anti-PDK1 Antibody (A01268-1) overnight at 4°C. Peroxidase Conjugated Goat Anti-rabbit IgG was used as secondary antibody and incubated for 30 minutes at 37°C. The tissue section was developed using HRP Conjugated Rabbit IgG Super Vision Assay Kit (Catalog # SV0002) with DAB as the chromogen.



IHC analysis of PDK1 using anti-PDK1 antibody (A01268-1). PDK1 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 1ug/ml rabbit anti-PDK1 Antibody (A01268-1) 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.

### 1 Publications Citing This Product

1. PubMed ID: 29845188, lncRNA Ftx promotes aerobic glycolysis and tumor progression through the PPAR $\gamma$  pathway in hepatocellular carcinoma

Visit [bosterbio.com/anti-pdk1-picoband-trade-antibody-a01268-1-boster.html](http://bosterbio.com/anti-pdk1-picoband-trade-antibody-a01268-1-boster.html) to see all 1 publications.

## Submit a product review to Biocompare.com

Submit a review of this product to Biocompare.com to receive a \$20 Amazon.com giftcard! Your reviews help your fellow scientists make the right decisions. Thank you for your contribution.



Anti-Mitochondrial Pyruvate dehydrogenase kinase 1/PDK1 Antibody

For Research Use Only. Not for use in diagnostic procedures.