BOSTER
antibody and ELISA experts

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3942 B Valley Ave, Pleasanton, CA 94566
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Anti-PYROXD1 Antibody Picoband®

Catalog Number: A17214-3

About PYROXD1

Pyridine nucleotide-disulphide oxidoreductase domain 1 is a protein that in humans is encoded by the PYROXD1 gene. It is mapped to 12p12.1. This gene encodes a nuclear-cytoplasmic pyridine nucleotide-disulphide reductase (PNDR). PNDRs are flavoproteins that catalyze the pyridine nucleotide-dependent reduction of thiol residues in other proteins. The encoded protein belongs to the class I pyridine nucleotide-disulphide oxidoreductase family but lacks the C-terminal dimerization domain found in other family members and instead has a C-terminal nitrile reductase domain. It localizes to the nucleus and to striated sarcomeric compartments. Naturally occurring mutations in this gene cause early-onset myopathy with internalized nuclei and myofibrillar disorganization. A pseudogene of this gene has been defined on chromosome 11.

Overview

Product Name	Anti-PYROXD1 Antibody Picoband®
Reactive Species	Human, Mouse, Rat
Description	Boster Bio Anti-PYROXD1 Antibody Picoband® catalog # A17214-3. Tested in ELISA, IHC, 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	ELISA, 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	Q8WU10

Technical Details

Immunogen	E.coli-derived human PYROXD1 recombinant protein (Position: K48-N230).
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

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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. 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 ELISA, 0.1-0.5ug/ml

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Anti-PYROXD1 Antibody Picoband® (A17214-3) Images

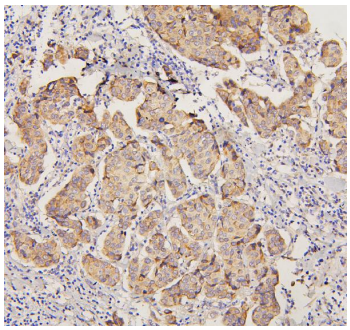

Figure 1. IHC analysis of PYROXD1 using anti-PYROXD1 antibody (A17214-3).
PYROXD1 was detected in paraffin-embedded section of human mammary cancer tissues. Heat mediated antigen retrieval was performed in citrate buffer (pH6, epitope retrieval solution) for 20 mins. The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 1ug/ml rabbit anti-PYROXD1 Antibody (A17214-3) 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.

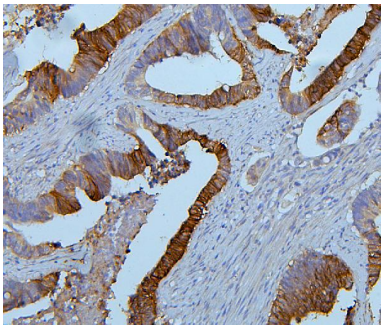

Figure 2. IHC analysis of PYROXD1 using anti-PYROXD1 antibody (A17214-3).
PYROXD1 was detected in paraffin-embedded section of human colon cancer tissues. Heat mediated antigen retrieval was performed in citrate buffer (pH6, epitope retrieval solution) for 20 mins. The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 1ug/ml rabbit anti-PYROXD1 Antibody (A17214-3) 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.

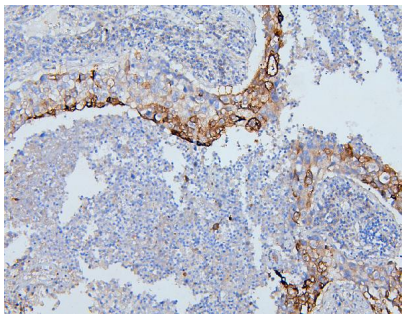

Figure 3. IHC analysis of PYROXD1 using anti-PYROXD1 antibody (A17214-3).
PYROXD1 was detected in paraffin-embedded section of human lung cancer tissues. Heat mediated antigen retrieval was performed in citrate buffer (pH6, epitope retrieval solution) for 20 mins. The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 1ug/ml rabbit anti-PYROXD1 Antibody (A17214-3) 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.

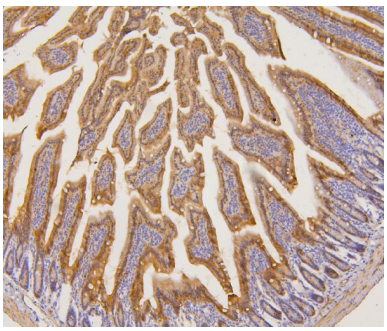

Figure 4. IHC analysis of PYROXD1 using anti-PYROXD1 antibody (A17214-3).
PYROXD1 was detected in paraffin-embedded section of mouse intestine tissues. Heat mediated antigen retrieval was performed in citrate buffer (pH6, epitope retrieval solution) for 20 mins. The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 1ug/ml rabbit anti-PYROXD1 Antibody (A17214-3) overnight at 4°C. Biotinylated goat anti-rabbit IgG was used as secondary antibody and incubated for 30 minutes at 37°C.

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The tissue section was developed using Strepavidin-Biotin-Complex (SABC)(Catalog # SA1022) with DAB as the chromogen.

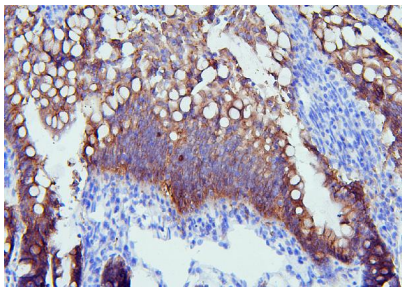

Figure 5. IHC analysis of PYROXD1 using anti-PYROXD1 antibody (A17214-3).
PYROXD1 was detected in paraffin-embedded section of rat intestine tissues. Heat mediated antigen retrieval was performed in citrate buffer (pH6, epitope retrieval solution) for 20 mins. The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 1ug/ml rabbit anti-PYROXD1 Antibody (A17214-3) 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.

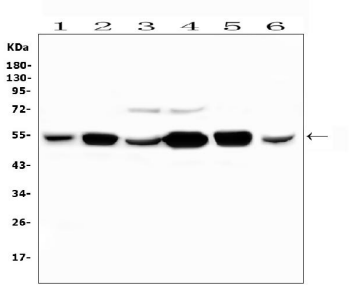

Figure 6. Western blot analysis of PYROXD1 using anti-PYROXD1 antibody (A17214-3).
Electrophoresis was performed on a 5-20% SDS-PAGE gel at 70V (Stacking gel) / 90V (Resolving gel) for 2-3 hours. The sample well of each lane was loaded with 50ug of sample under reducing conditions.
Lane 1: human placenta tissue lysates,
Lane 2: human U-87MG whole cell lysates,
Lane 3: human HL-60 whole cell lysates,
Lane 4: human THP-1 whole cell lysates,
Lane 5: human PC-3 whole cell lysates,
Lane 6: rat kidney 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-PYROXD1 antigen affinity purified polyclonal antibody (Catalog # A17214-3) 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 PYROXD1 at approximately 50-56KD. The expected band size for PYROXD1 is at 50KD.