

Anti-PAX6 Antibody Picoband™

Catalog Number: PB9768

About PAX6

Paired box protein Pax-6, also known as aniridia type II protein (AN2) or oculorhombin, is a protein that in humans is encoded by the PAX6 gene. This gene encodes a homeobox and paired domain-containing protein that binds DNA and functions as a regulator of transcription. Activity of this protein is key in the development of neural tissues, particularly the eye. In addition, this gene is regulated by multiple enhancers located up to hundreds of kilobases distant from this locus. Mutations in this gene or in the enhancer regions can cause ocular disorders such as aniridia and Peter's anomaly. Use of alternate promoters and alternative splicing result in multiple transcript variants encoding different isoforms.

Overview

Product Name	Anti-PAX6 Antibody Picoband™
Reactive Species	Human, Mouse, Rat
Description	Boster Bio Anti-PAX6 Antibody Picoband™ catalog # PB9768. Tested in IHC, WB applications. This antibody reacts with Human, Mouse, Rat.
Application	IHC, WB
Clonality	Polyclonal
Formulation	Each vial contains 5mg BSA, 0.9mg NaCl, 0.2mg Na ₂ HPO ₄ , 0.05mg NaN ₃ .
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	P26367

Technical Details

Immunogen	A synthetic peptide corresponding to a sequence in the middle region of human PAX6, identical to the related mouse and rat sequences.
Predicted Reactive Species	Bovine, Canine, Chicken, Horse, Monkey, Rabbit, Zebrafish
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 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: Immunohistochemistry (Paraffin-embedded Section), 0.5-1ug/ml, Human, Mouse, Rat, By Heat Western blot, 0.1-0.5ug/ml, Human, Mouse, Rat

Anti-PAX6 Antibody Picoband™ (PB9768) Images

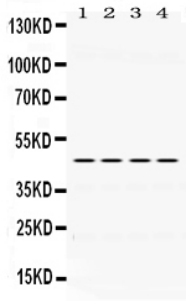


Figure 1. Western blot analysis of PAX6 using anti-PAX6 antibody (PB9768).

Electrophoresis was performed on a 5-20% SDS-PAGE gel at 70V (Stacking gel) / 90V (Resolving gel) for 2-3 hours.

Lane 1: Rat Brain Tissue Lysate at 50ug,

Lane 2: Mouse Brain Tissue Lysate at 50ug,

Lane 3: U87 Whole Cell Lysate at 40ug,

Lane 4: HELA Whole Cell Lysate at 40ug.

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-PAX6 antigen affinity purified polyclonal antibody (Catalog # PB9768) 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 PAX6 at approximately 47 kDa. The expected band size for PAX6 is at 47 kDa.

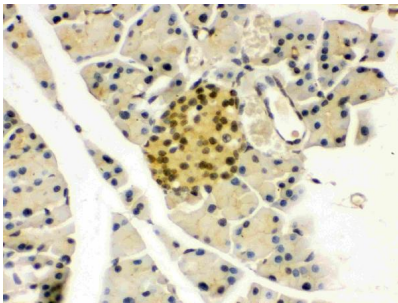


Figure 2. IHC analysis of PAX6 using anti-PAX6 antibody (PB9768).

PAX6 was detected in a paraffin-embedded section of mouse pancreas 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 1 ug/ml rabbit anti-PAX6 Antibody (PB9768) 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.

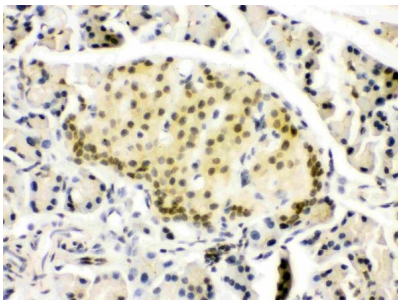
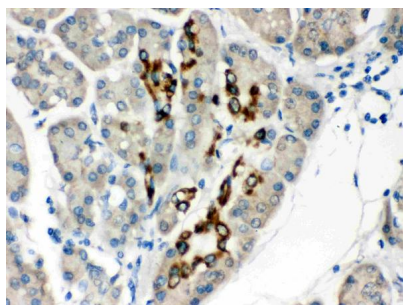


Figure 3. IHC analysis of PAX6 using anti-PAX6 antibody (PB9768).

PAX6 was detected in a paraffin-embedded section of rat pancreas 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 1 ug/ml rabbit anti-PAX6 Antibody (PB9768) 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.

Figure 4. IHC analysis of PAX6 using anti-PAX6 antibody (PB9768).

PAX6 was detected in a paraffin-embedded section of human pancreatic 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 1 ug/ml rabbit anti-PAX6 Antibody (PB9768) 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.

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