

## Anti-Pax2 Antibody Picoband®

Catalog Number: PB9734

### About PAX2

Paired box gene 2, also known as PAX2, is a protein which in humans is encoded by the PAX2 gene. This gene is mapped to 10q24. PAX2 encodes paired box gene 2, one of many human homologues of the *Drosophila melanogaster* gene *prd*. The central feature of this transcription factor gene family is the conserved DNA-binding paired box domain. PAX2 is believed to be a target of transcriptional suppression by the tumor suppressor gene WT1. Mutations within PAX2 have been shown to result in optic nerve colobomas and renal hypoplasia. Alternative splicing of this gene results in multiple transcript variants.

### Overview

Product Name	Anti-Pax2 Antibody Picoband®
Reactive Species	Human, Mouse, Rat
Description	Boster Bio Anti-Pax2 Antibody Picoband® catalog # PB9734. Tested in 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	IHC, WB
Clonality	Polyclonal
Formulation	Each vial contains antibody formulated with stabilizing components, 0.9 mg NaCl, 0.2 mg Na <sub>2</sub> HPO <sub>4</sub> , and 0.05 mg NaN <sub>3</sub> . *This antibody is supplied in a stabilized formulation. Compatibility with conjugation reactions depends on the chemistry of the conjugation method used. For conjugation methods that are not compatible with the stabilizing components present in this formulation, a carrier-free antibody format is required.
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	Q02962

### Technical Details

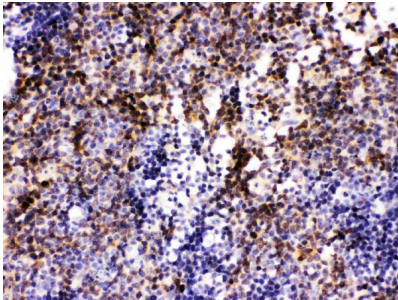
Immunogen	A synthetic peptide corresponding to a sequence at the C-terminus of human Pax2, identical to the related mouse sequence.
Recommended Detection Systems	Boster recommends Enhanced Chemiluminescent Kit with anti-Rabbit IgG (EK1002) for Western blot, and HRP Conjugated anti-Rabbit IgG Super Vision 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	Immunohistochemistry (Paraffin-embedded Section), 0.5-1ug/ml, Human, Mouse, Rat Western blot, 0.1-0.5ug/ml, Rat, Human

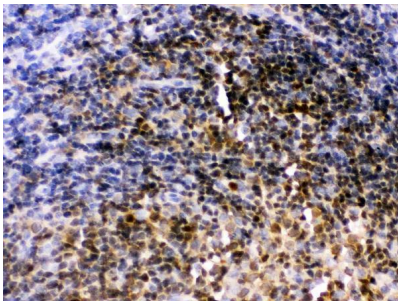
## Anti-Pax2 Antibody Picoband® (PB9734) Images



Western blot analysis of Pax2 using anti-Pax2 antibody (PB9734). 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 50 ug of sample under reducing conditions. Lane 1: Rat Brain Tissue Lysate, Lane 2: Rat Lung Tissue Lysate. 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-Pax2 antigen affinity purified polyclonal antibody (Catalog # PB9734) 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 Pax2 at approximately 45 kDa. The expected band size for Pax2 is at 45 kDa.

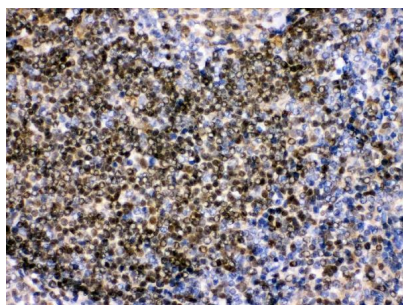


IHC analysis of Pax2 using anti-Pax2 antibody (PB9734). Pax2 was detected in a paraffin-embedded section of mouse lymphaden tissue. Heat mediated antigen retrieval was performed in EDTA buffer (pH 8.0, epitope retrieval solution). The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 1 ug/ml rabbit anti-Pax2 Antibody (PB9734) 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.



IHC analysis of Pax2 using anti-Pax2 antibody (PB9734). Pax2 was detected in a paraffin-embedded section of rat lymphaden 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-Pax2 Antibody (PB9734) 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.

IHC analysis of Pax2 using anti-Pax2 antibody (PB9734). Pax2 was detected in a paraffin-embedded section of human tonsil 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-Pax2 Antibody (PB9734) 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.

## 2 Publications Citing This Product

1. PubMed ID: 10.1016/j.bbr.2020.112803, Increased repetitive self-grooming occurs in Pax2 mutant mice generated using CRISPR/Cas9
2. PubMed ID: 29138573, Matrine suppresses the migration and invasion of NSCLC cells by inhibiting PAX2-induced epithelial-mesenchymal transition

Visit [bosterbio.com/anti-pax2-picoband-trade-antibody-pb9734-boster.html](https://bosterbio.com/anti-pax2-picoband-trade-antibody-pb9734-boster.html) to see all 2 publications.

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Anti-Pax2 Antibody

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