

**Anti-PAX6 Picoband Antibody**  
Catalog # ABO12454

**Specification**

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**Anti-PAX6 Picoband Antibody - Product Information**

Application	WB, IHC
Primary Accession	<a href="#">P26367</a>
Host	Rabbit
Reactivity	Human, Mouse, Rat
Clonality	Polyclonal
Format	Lyophilized

**Description**

Rabbit IgG polyclonal antibody for Paired box protein Pax-6(PAX6) detection. Tested with WB, IHC-P in Human;Mouse;Rat.

**Reconstitution**

Add 0.2ml of distilled water will yield a concentration of 500ug/ml.

**Anti-PAX6 Picoband Antibody - Additional Information**

**Gene ID** 5080

**Other Names**

Paired box protein Pax-6, Aniridia type II protein, Oculorhombin, PAX6, AN2

**Calculated MW**

46683 MW KDa

**Application Details**

Immunohistochemistry(Paraffin-embedded Section), 0.5-1 µg/ml, Human, Mouse, Rat, By Heat  
Western blot, 0.1-0.5 µg/ml, Human, Mouse, Rat

**Subcellular Localization**

Nucleus.

**Tissue Specificity**

Fetal eye, brain, spinal cord and olfactory epithelium. Isoform 5a is less abundant than the PAX6 shorter form.

**Protein Name**

Paired box protein Pax-6

**Contents**

Each vial contains 5mg BSA, 0.9mg NaCl, 0.2mg Na<sub>2</sub>HPO<sub>4</sub>, 0.05mg Na<sub>3</sub>N.

**Immunogen**

A synthetic peptide corresponding to a sequence in the middle region of human PAX6 (195-233aa EDSDEAQMRLQLKRKLQRNRTSFTQEIQIEALEKEFERTH), identical to the related mouse and rat sequences.

### Purification

Immunogen affinity purified.

### Cross Reactivity

No cross reactivity with other proteins.

### Storage

At -20°C for one year. After r°Constitution, at 4°C for one month. It°Can also be aliquotted and stored frozen at -20°C for a longer time.Avoid repeated freezing and thawing.

## Anti-PAX6 Picoband Antibody - Protein Information

**Name** PAX6

**Synonyms** AN2

### Function

Transcription factor with important functions in the development of the eye, nose, central nervous system and pancreas. Required for the differentiation of pancreatic islet alpha cells (By similarity). Competes with PAX4 in binding to a common element in the glucagon, insulin and somatostatin promoters. Regulates specification of the ventral neuron subtypes by establishing the correct progenitor domains (By similarity). Acts as a transcriptional repressor of NFATC1- mediated gene expression (By similarity).

### Cellular Location

Nucleus {ECO:0000250|UniProtKB:P63015}. [Isoform 5a]: Nucleus {ECO:0000250|UniProtKB:P63016}

### Tissue Location

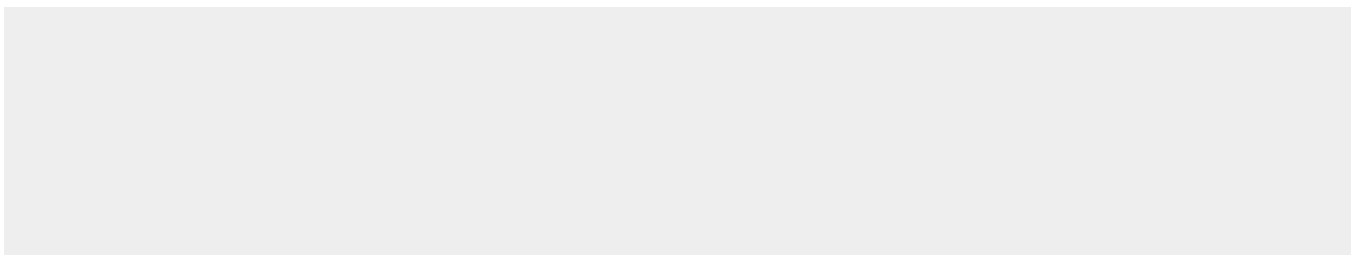
[Isoform 1]: Expressed in lymphoblasts.

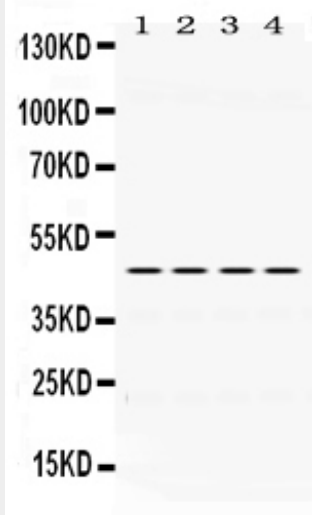
## Anti-PAX6 Picoband Antibody - Protocols

Provided below are standard protocols that you may find useful for product applications.

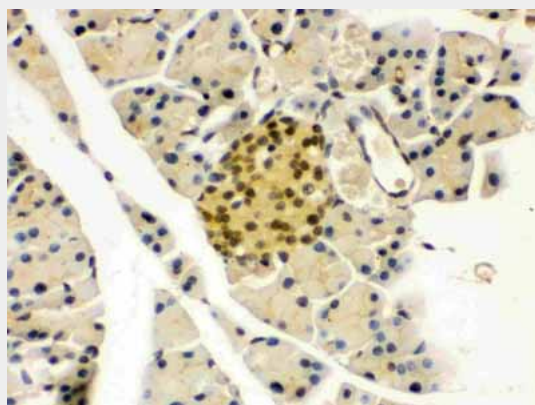
- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

## Anti-PAX6 Picoband Antibody - Images

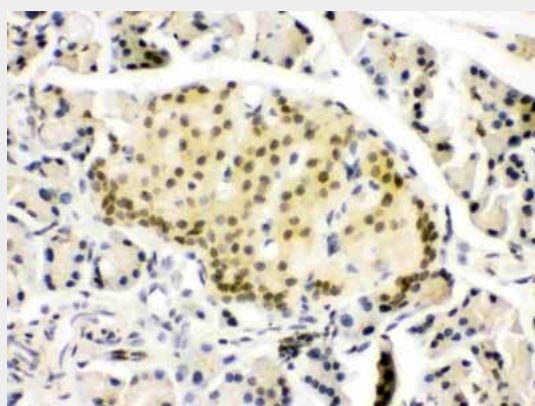




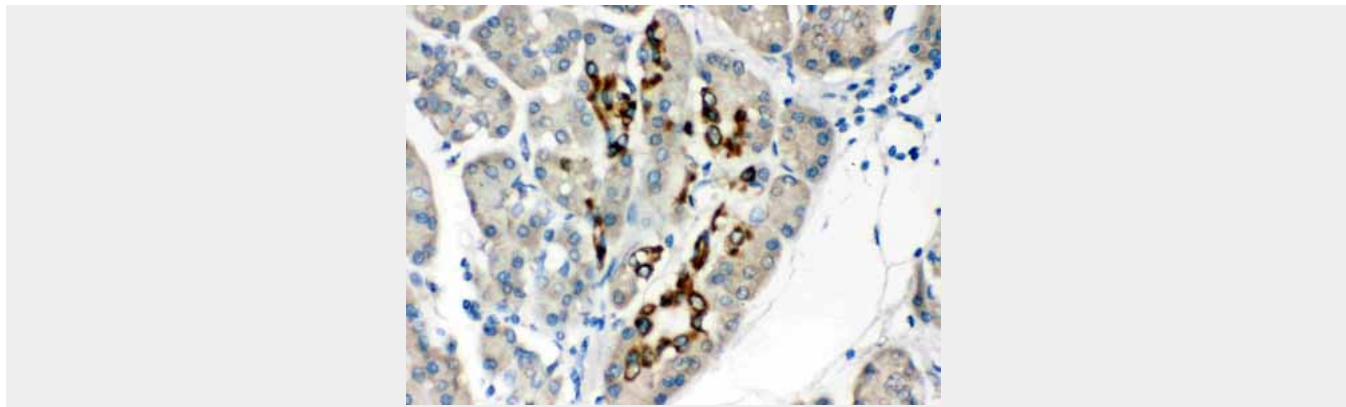
Anti- PAX6 Picoband antibody, ABO12454, Western blotting All lanes: Anti PAX6 (ABO12454) at 0.5ug/ml Lane 1: Rat Brain Tissue Lysate at 50ug Lane 2: Mouse Brain Tissue Lysate at 50ug Lane 3: U87 Whole Cell Lysate at 40ug Lane 4: HELA Whole Cell Lysate at 40ug Predicted bind size: 47KD Observed bind size: 47KD



Anti- PAX6 Picoband antibody, ABO12454, IHC(P) IHC(P): Mouse Pancreas Tissue



Anti- PAX6 Picoband antibody, ABO12454, IHC(P) IHC(P): Rat Pancreas Tissue



Anti- PAX6 Picoband antibody, ABO12454, IHC(P)IHC(P): Human Pancreatic Cancer Tissue

#### **Anti-PAX6 Picoband Antibody - Background**

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.