10320 Camino Santa Fe, Suite G
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Anti-PAX6 Picoband Antibody

Catalog # ABO12454

Specification

Anti-PAX6 Picoband Antibody - Product Information

Application	**WB, IHC-P**
Primary Accession	P26367
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 Na2HPO4, 0.05mg NaN3.

Immunogen
A synthetic peptide corresponding to a sequence in the middle region of human PAX6 (195-233aa EDSDEAQMRLQLKRKLQRNRTSFTQEQIEALEKEFERTH), 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 Cytomety
- Cell Culture

Anti-PAX6 Picoband Antibody - Images

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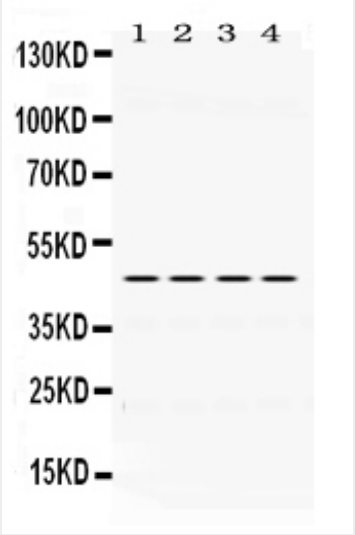
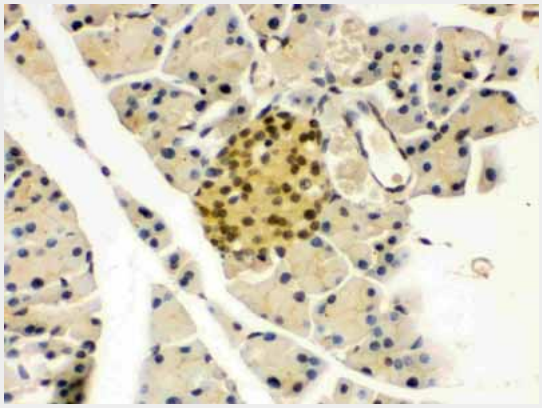
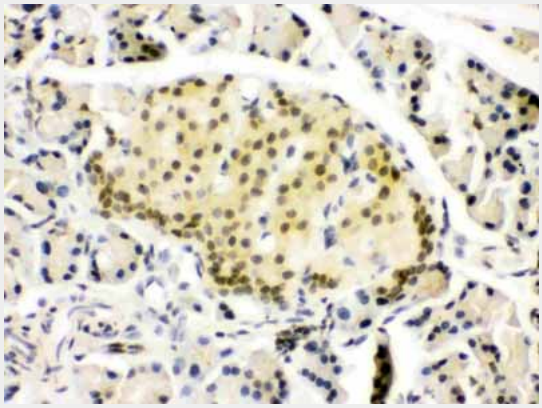


Anti- PAX6 Picoband antibody, ABO12454, Western blottingAll lanes: Anti PAX6 (ABO12454) at 0.5ug/mlLane 1: Rat Brain Tissue Lysate at 50ugLane 2: Mouse Brain Tissue Lysate at 50ugLane 3: U87 Whole Cell Lysate at 40ugLane 4: HELA Whole Cell Lysate at 40ugPredicted bind size: 47KDObserved bind size: 47KD



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



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

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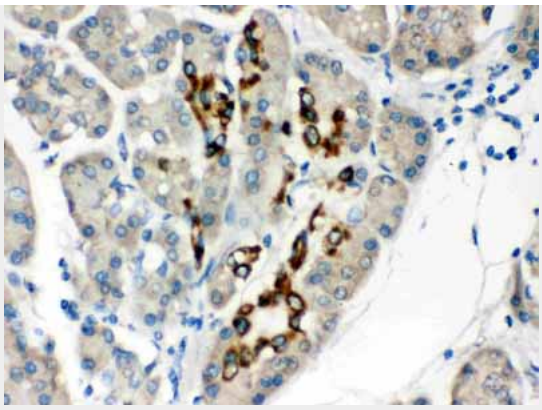

Anti- PAX6 Picoband antibody, ABO12454, IHC(P)IHC(P): Human Pancreatic Cancer Tissue

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.