

**Anti-PAX6 (MOUSE) Monoclonal Antibody**  
**PAX6 Antibody**  
**Catalog # ASR4291****Specification**

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**Anti-PAX6 (MOUSE) Monoclonal Antibody - Product Information**

Host	<b>Mouse</b>
Conjugate	<b>Unconjugated</b>
Target Species	<b>Human</b>
Reactivity	<b>Human</b>
Clonality	<b>Monoclonal</b>
Application	<b>WB, E, I, LCI</b>
Application Note	<b>Anti-PAX6 antibody has been tested by ELISA and Immunofluorescence and suitable for Western Blotting. Specific conditions for reactivity should be optimized by the end user. Expect a band approximately 46.7 kDa in size corresponding to PAX6 by western blotting in the appropriate cell lysate or extract.</b>
Physical State	<b>Liquid (sterile filtered)</b>
Buffer	<b>0.02 M Potassium Phosphate, 0.15 M Sodium Chloride, pH 7.2</b>
Immunogen	<b>PAX6 protein A purified antibody was prepared in mice by repeated immunizations with a recombinant protein corresponding to human PAX6 protein.</b>
Preservative	<b>0.01% (w/v) Sodium Azide</b>

**Anti-PAX6 (MOUSE) Monoclonal Antibody - Additional Information****Gene ID 5080****Other Names**  
5080**Purity**

Anti-PAX6 was purified from clarified ascites by Protein A chromatography. Cross-reactivity with PAX6 from other sources has not been determined.

**Storage Condition**

Store vial at -20° C prior to opening. Aliquot contents and freeze at -20° C or below for extended storage. Avoid cycles of freezing and thawing. Centrifuge product if not completely clear after standing at room temperature. This product is stable for several weeks at 4° C as an undiluted liquid. Dilute only prior to immediate use.

**Precautions Note**

This product is for research use only and is not intended for therapeutic or diagnostic applications.

## Anti-PAX6 (MOUSE) Monoclonal 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 (MOUSE) Monoclonal 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 (MOUSE) Monoclonal Antibody - Images

## Anti-PAX6 (MOUSE) Monoclonal Antibody - Background

Paired box protein Pax-6 also known as aniridia type II protein (AN2) or oculorhombin is a transcription factor with key functions in the development of the eye, nose, central nervous system and pancreas. Pax6 further seems to be required for the differentiation of pancreatic islet alpha cells. PAX6 has been shown to bind to a promoter element in the glucagon, insulin and somatostatin promoters and regulates the specification of the ventral neuron subtypes by establishing the correct progenitor domains. Isoform 5a appears to function as a molecular switch that specifies target genes. Anti-PAX6 antibody is ideal for researchers interested in developmental biology, stem cell research, cell growth and cancer research.