

**PAX6 Antibody**  
**Mouse Monoclonal Antibody (Mab)**  
**Catalog # AM1871b**

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**Specification**

**PAX6 Antibody - Product Information**

Application	<b>WB,E</b>
Primary Accession	<a href="#">P26367</a>
Other Accession	<a href="#">P63015</a> , <a href="#">Q1LZF1</a> , <a href="#">NP_001121084.1</a> , <a href="#">NP_001595.2</a>
Reactivity	<b>Human</b>
Predicted	<b>Bovine, Mouse</b>
Host	<b>Mouse</b>
Clonality	<b>Monoclonal</b>
Isotype	<b>IgM,K</b>
Calculated MW	<b>46683</b>

**PAX6 Antibody - Additional Information**

**Gene ID** 5080

**Other Names**

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

**Target/Specificity**

This PAX6 monoclonal antibody is generated from mouse immunized with PAX6 recombinant protein.

**Dilution**

WB~~1:100~1000

**Format**

Purified monoclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is prepared by Euglobin precipitation followed by dialysis against PBS.

**Storage**

Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

**Precautions**

PAX6 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

**PAX6 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

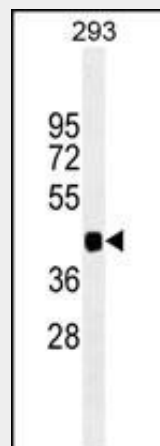
[Isoform 1]: Expressed in lymphoblasts.

### PAX6 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](#)

### PAX6 Antibody - Images



PAX6 Antibody (Cat. #AM1871b) western blot analysis in 293 cell line lysates (35µg/lane). This demonstrates the PAX6 antibody detected the PAX6 protein (arrow).

### PAX6 Antibody - Background

This gene encodes paired box gene 6, one of many human homologs of the *Drosophila melanogaster* gene *prd*. In addition to the hallmark feature of this gene family, a conserved paired box domain, the encoded protein also contains a homeo box domain. Both domains are known to bind DNA, and function as regulators of gene transcription. This gene is expressed in the developing nervous

system, and in developing eyes. Mutations in this gene are known to cause ocular disorders such as aniridia and Peter's anomaly. Alternatively spliced transcript variants encoding either the same or different isoform have been found for this gene. [provided by RefSeq].

#### **PAX6 Antibody - References**

Gosmain, Y., et al. J. Biol. Chem. 285(43):33381-33393(2010)  
Vuzman, D., et al. Biophys. J. 99(4):1202-1211(2010)  
Zhang, X., et al. Cell Stem Cell 7(1):90-100(2010)  
Bremond-Gignac, D., et al. Mol. Vis. 16, 1705-1711 (2010) :  
Cai, F., et al. Mol. Vis. 16, 1141-1145 (2010) :