

**PAX6 Antibody**  
**Purified Mouse Monoclonal Antibody**  
**Catalog # AO2103a**

**Specification**

**PAX6 Antibody - Product Information**

Application	<b>E, WB, FC, IHC</b>
Primary Accession	<a href="#">P26367</a>
Reactivity	<b>Human</b>
Host	<b>Mouse</b>
Clonality	<b>Monoclonal</b>
Isotype	<b>IgG1</b>
Calculated MW	<b>46.7kDa KDa</b>

**Description**

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 multiple isoforms have been observed for this gene.

**Immunogen**

Purified recombinant fragment of human PAX6 (AA: 1-122) expressed in E. Coli.

**Formulation**

Purified antibody in PBS with 0.05% sodium azide

**PAX6 Antibody - Additional Information**

**Gene ID** 5080

**Other Names**

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

**Dilution**

E~~1/10000  
WB~~1/500 - 1/2000  
FC~~1/200 - 1/400  
IHC~~1/200 - 1/1000

**Storage**

Maintain refrigerated at 2-8°C for up to 6 months. 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](#)