

# **PAX6 Antibody**

Purified Mouse Monoclonal Antibody Catalog # AO2103a

#### **Product Information**

ApplicationWB, IHC, FC, EPrimary AccessionP26367ReactivityHumanHostMouseClonalityMonoclonal

Clone Names 1F6G2 Isotype IgG1 Calculated MW 46683

**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

## **Additional Information**

**Gene ID** 5080

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

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

#### **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.

### References

1.PLoS One. 2014 Jan 15;9(1):e85738.2.Curr Eye Res. 2012 Oct;37(10):879-83.

# **Images**

