

#### **PAX6 Antibody**

Rabbit Polyclonal Antibody Catalog # ABV10480

## **Specification**

## **PAX6 Antibody - Product Information**

Application
Primary Accession
Other Accession
Reactivity
Host
Clonality
Isotype

WB
P63016
EDL79723
Human, Mouse, Rat
Rabbit
Polyclonal
Rabbit IgG
46754

## **PAX6 Antibody - Additional Information**

**Gene ID 25509** 

Calculated MW

Application & Usage

Western blotting (0.5-4  $\mu$ g/ml). However, the optimal conditions should be determined individually. The antibody recognizes ~32 kDa and 47 kDa isoforms of PAX6 in samples from human, mouse and rat origins. Reactivity to other species has not been tested.

### **Other Names**

PAX6, WAGR, Oculorhombin, AN2, MGDA, MGC17209, AN

## Target/Specificity

PAX6

## **Antibody Form**

Liquid

## **Appearance**

Colorless liquid

#### **Formulation**

 $100 \mu g$  (0.5 mg/ml) affinity purified rabbit polyclonal antibody in phosphate-buffered saline (PBS), pH 7.2, containing 30% glycerol, 0.5% BSA, and 0.01% thimerosal.

## **Handling**

The antibody solution should be gently mixed before use.

## **Reconstitution & Storage**

-20 °C



# **Background Descriptions**

#### **Precautions**

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

## **PAX6 Antibody - Protein Information**

Name Pax6

Synonyms Pax-6, Sey

## **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. Competes with PAX4 in binding to a common element in the glucagon, insulin and somatostatin promoters (By similarity). Regulates specification of the ventral neuron subtypes by establishing the correct progenitor domains. Acts as a transcriptional repressor of NFATC1-mediated gene expression (By similarity).

#### **Cellular Location**

Nucleus {ECO:0000250|UniProtKB:P63015}. [Isoform 5a]: Nucleus

## **PAX6 Antibody - Protocols**

Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- <u>Immunoprecipitation</u>
- Flow Cytomety
- Cell Culture

# **PAX6 Antibody - Images**

# **PAX6 Antibody - Background**

PAX genes encode nuclear transcription factors that may function as major controllers of developmental processes in both vertebrates and invertebrates. Mutations in murine PAX genes underlie three natural mouse alleles and several corresponding human syndromes (aniridia, foveal hypoplasia and Peters' anomaly). Murine PAX genes have been shown to be proto-oncogenes. Furthermore, human PAX genes have recently been demonstrated to play an influential part in some common human cancers such as brain tumors and lymphomas. All PAX genes encode a DNA-binding domain termed the paired domain and in addition some also encode a second binding domain--the paired type homeobox. PAX6 is involved in the early development of the optical vesicle and has been shown to interact with Six3, another important visual development protein.