

#### **PAX6 Polyclonal Antibody**

Purified Rabbit Polyclonal Antibody Catalog # ABV11548

## **Specification**

# **PAX6 Polyclonal Antibody - Product Information**

Application WB
Primary Accession P26367

Reactivity Human, Mouse, Rat, Chicken, Sheep

Host Rabbit
Clonality Polyclonal
Calculated MW 46683

# **PAX6 Polyclonal Antibody - Additional Information**

**Gene ID 5080** 

#### **Other Names**

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

# Target/Specificity

PAX6

#### **Formulation**

100 mg (0.5 mg/ml) in phosphate buffered saline (PBS), pH 7.2, containing 50% glycerol, 1% BSA, 0.02% sodium azide.

#### Handling

The antibody solution should be gently mixed before use.

# **Background Descriptions**

## **Precautions**

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

## **PAX6 Polyclonal 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 Polyclonal Antibody - Protocols**

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

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

# **PAX6 Polyclonal Antibody - Images**

# **PAX6 Polyclonal 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.