10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

PAX6 Antibody
Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP12920A

Specification

PAX6 Antibody - Product Information

Application	**IF, IHC-P, WB,E**
Primary Accession	P26367
Other Accession	NP_001595.2, NP_001121084.1
Reactivity	**Human**
Host	**Rabbit**
Clonality	**Polyclonal**
Isotype	**Rabbit IgG**

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 antibody is generated from rabbits immunized with a recombinant protein from human PAX6.

Dilution
IF~~1:10~50
IHC-P~~1:10~50
WB~~1:1000
E~~Use at an assay dependent concentration.

Format
Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.

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}

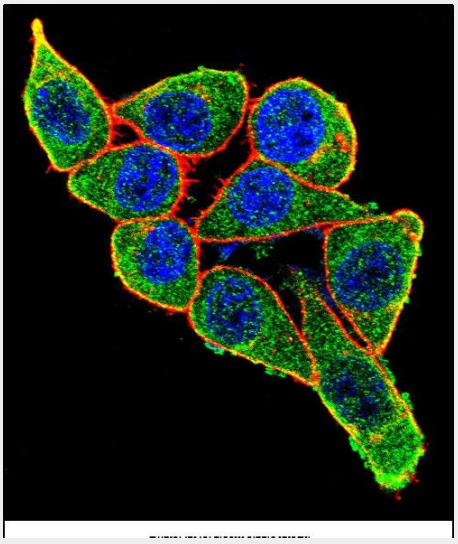
Tissue Location
[Isoform 1]: Expressed in lymphoblasts.

PAX6 Antibody - Protocols

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

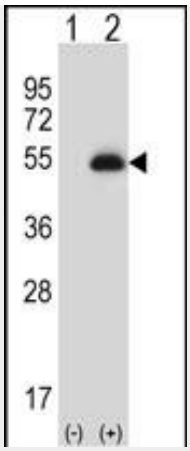
- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

PAX6 Antibody - Images

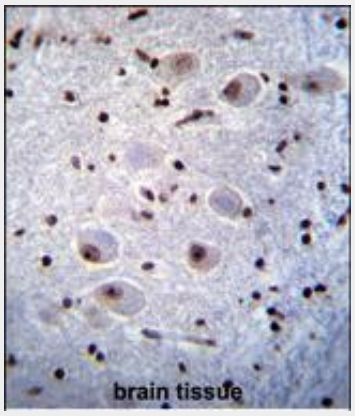


Confocal immunofluorescent analysis of PAX6 Antibody(Cat#AP12920a) with Hela cell followed by Alexa Fluor 488-conjugated goat anti-rabbit lgG (green). Actin filaments have been labeled with Alexa Fluor 555 phalloidin (red).DAPI was used to stain the cell nuclear (blue).

10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999



Western blot analysis of PAX6 (arrow) using rabbit polyclonal PAX6 Antibody (Cat. #AP12920a). 293 cell lysates (2 ug/lane) either nontransfected (Lane 1) or transiently transfected (Lane 2) with the PAX6 gene.



PAX6 Antibody (Cat. #AP12920a)immunohistochemistry analysis in formalin fixed and paraffin embedded human brain tissue followed by peroxidase conjugation of the secondary antibody and DAB staining.This data demonstrates the use of PAX6 Antibody for immunohistochemistry. Clinical relevance has not been evaluated.

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) :