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PAX6-T373 Antibody
Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP6929d

Specification

PAX6-T373 Antibody - Product Information

Application	**IF, WB, IHC-P,E**
Primary Accession	P26367
Reactivity	**Human, Rat**
Host	**Rabbit**
Clonality	**Polyclonal**
Isotype	**Rabbit IgG**
Antigen Region	**352-380**

PAX6-T373 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 KLH conjugated synthetic peptide between 352-380 amino acids from human PAX6.

Dilution
IF~~1:10~50
WB~~1:1000
IHC-P~~1:10~50

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-T373 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

PAX6-T373 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}

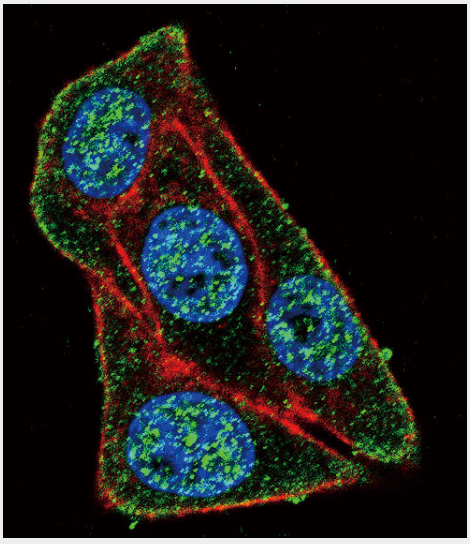
Tissue Location
[Isoform 1]: Expressed in lymphoblasts.

PAX6-T373 Antibody - Protocols

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

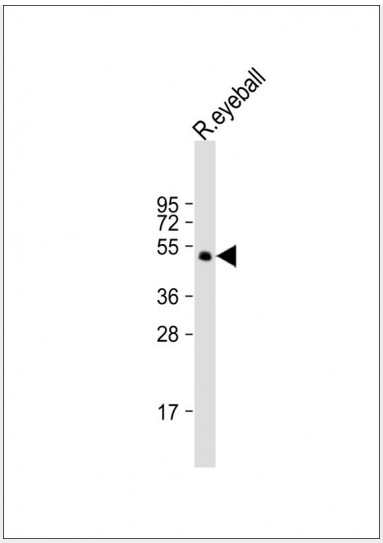
- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

PAX6-T373 Antibody - Images

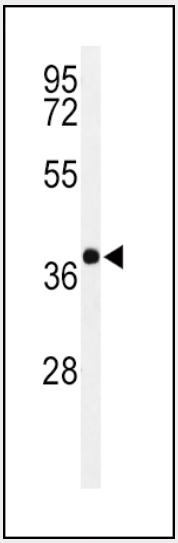


Confocal immunofluorescent analysis of PAX6-T373 Antibody(Cat#AP6929d) with Hela cell followed by Alexa Fluor 488-conjugated goat anti-rabbit lgG (green). Actin filaments have been labeled with Alexa Fluor 555 phalloidin (red).DAPI was used to stain the cell nuclear (blue).

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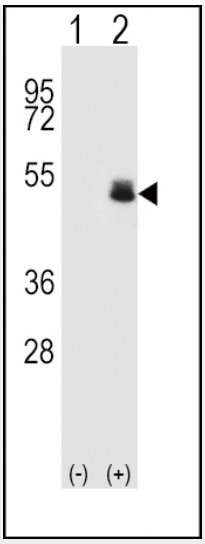


Anti-PAX6-T373 Antibody at 1:2000 dilution + rat eyeball lysate Lysates/proteins at 20 µg per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/10000 dilution. Predicted band size : 47 kDa Blocking/Dilution buffer: 5% NFDM/TBST.

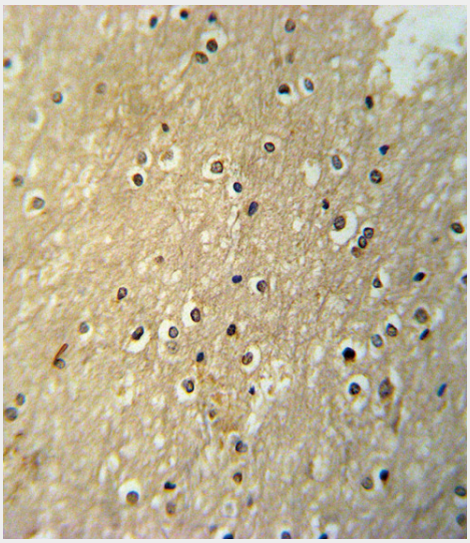


Western blot analysis of PAX6-T373 (Cat. #AP6929d) in Y79 cell line lysates (35ug/lane). PAX6 (arrow) was detected using the purified Pab.

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Western blot analysis of PAX6 (arrow) using rabbit polyclonal PAX6 Antibody (T373) (Cat. #AP6929d). 293 cell lysates (2 ug/lane) either nontransfected (Lane 1) or transiently transfected (Lane 2) with the PAX6 gene.



PAX6-T373 Antibody (Cat. #AP6929d) 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 the PAX6-T373 Antibody for immunohistochemistry. Clinical relevance has not been evaluated.

PAX6-T373 Antibody - Background

PAX6 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.

PAX6-T373 Antibody - References

Zhang, Y., et al. J. Biol. Chem. 285(4):2527-2536(2010)
McGeachie, M., et al. Circulation 120(24):2448-2454(2009)

Schmidt-Sidor, B., et al. Folia Neuropathol 47(4):372-382(2009)
Ng, T.K., et al. Mol. Vis. 15, 2239-2248 (2009)