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PAX6-T373 Antibody

Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP6929d

Product Information

Application	WB, IHC-P, IF, E
Primary Accession	P26367
Reactivity	Human, Rat, Mouse
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Clone Names	RB15517
Calculated MW	46683
Antigen Region	352-380

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	WB~~1:1000 IHC-P~~1:100~500 IF~~1:10~50 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-T373 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.

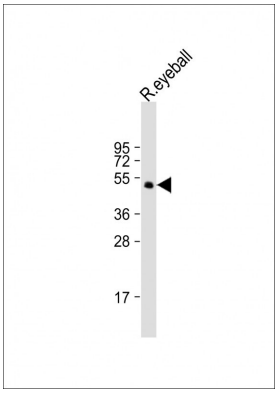
Background

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.

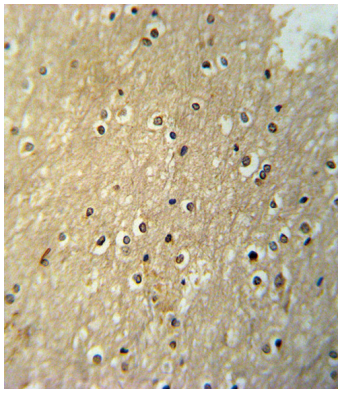
References

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)

Images



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.



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.

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).