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PAX6 Antibody (Center)

Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP6929c

Product Information

Application	IHC-P, IF, FC, WB, E
Primary Accession	P26367
Other Accession	P55864, P63016, P63015, Q1LZF1
Reactivity	Human, Rat, Mouse
Predicted	Bovine, Mouse, Rat, Xenopus, Canine, Rabbit, Chicken
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Calculated MW	46683
Antigen Region	183-210

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 183-210 amino acids from the Central region of human PAX6.
Dilution	IHC-P~~1:100~500 IF~~1:10~50 FC~~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 (Center) 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.

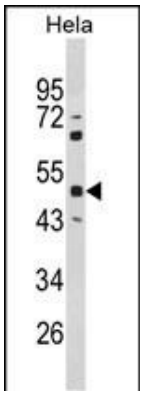
Background

PAX6 is 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.

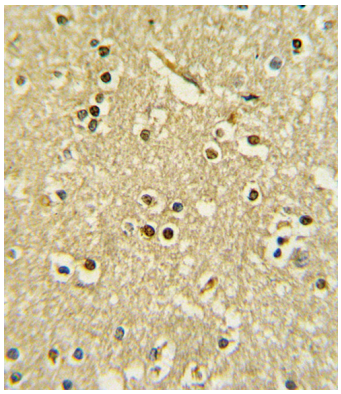
References

Firsova,N.V., et.al., Dokl. Biol. Sci. 426, 264-266 (2009)

Images

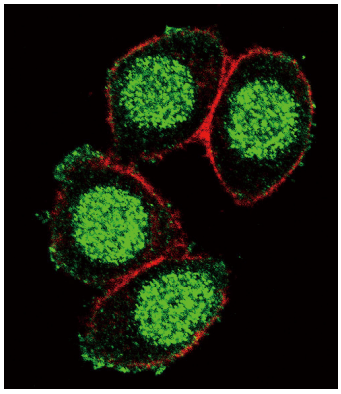


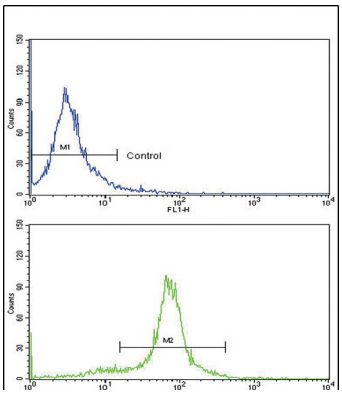
PAX6 Antibody (Center) (Cat. #AP6929c) western blot analysis in U251 cell line lysates (35ug/lane).This demonstrates the PAX6 antibody detected the PAX6 protein (arrow).



Formalin-fixed and paraffin-embedded human brain tissue with PAX6 Antibody (Center), which was peroxidase-conjugated to the secondary antibody, followed by DAB staining. This data demonstrates the use of this antibody for immunohistochemistry; clinical relevance has not been evaluated.

Confocal immunofluorescent analysis of PAX6 Antibody (Center)(Cat#AP6929c) 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).





Flow cytometric analysis of hela cells using PAX6 Antibody (Center)(bottom histogram) compared to a negative control cell (top histogram). FITC-conjugated goat-anti-rabbit secondary antibodies were used for the analysis.

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.