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PAX6 Antibody (Ascites)

Mouse Monoclonal Antibody (Mab)
Catalog # AM1871a

Product Information

Application	WB, IF, E
Primary Accession	P26367
Other Accession	P63015, Q1LZF1, NP_000271.1, NP_001595.2
Reactivity	Human
Predicted	Bovine, Mouse
Host	Mouse
Clonality	Monoclonal
Isotype	IgM,K
Clone Names	193CT15.2.2
Calculated MW	46683

Additional Information

Gene ID	5080
Other Names	Paired box protein Pax-6, Aniridia type II protein, Oculorhombin, PAX6, AN2
Target/Specificity	This PAX6 Monoclonal antibody was raised using purified His-tagged recombinant human PAX6.
Dilution	WB~~1:500~16000 IF~~1:10~50 E~~Use at an assay dependent concentration.
Format	Mouse monoclonal antibody supplied in crude ascites with 0.09% (W/V) sodium azide.
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 (Ascites) 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.

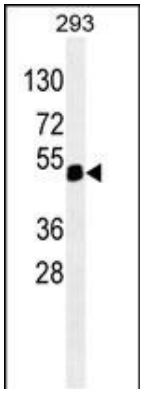
Background

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].

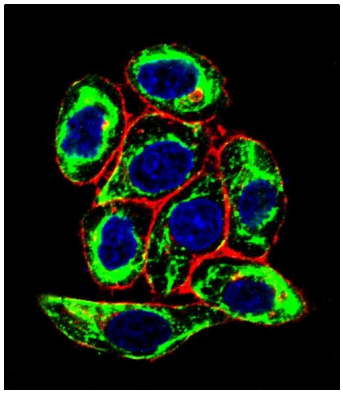
References

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) :

Images



PAX6 (Cat. #AM1871a) western blot analysis in 293 cell line lysates (35µg/lane).This demonstrates the PAX6 antibody detected the PAX6 protein (arrow).



Confocal immunofluorescent analysis of PAX6 Antibody (Ascites)(Cat#AM1871a) with Hela cell followed by Alexa Fluor® 488-conjugated goat anti-mouse lgG (green). Actin filaments have been labeled with Alexa Fluor® 555 phalloidin (red).DAPI was used to stain the cell nuclear (blue).