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PAX6 Antibody

Purified Mouse Monoclonal Antibody
Catalog # AO2103a

Product Information

Application	WB, IHC, FC, E
Primary Accession	P26367
Reactivity	Human
Host	Mouse
Clonality	Monoclonal
Clone Names	1F6G2
Isotype	IgG1
Calculated MW	46683
Description	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 multiple isoforms have been observed for this gene.
Immunogen	Purified recombinant fragment of human PAX6 (AA: 1-122) expressed in E. Coli.
Formulation	Purified antibody in PBS with 0.05% sodium azide

Additional Information

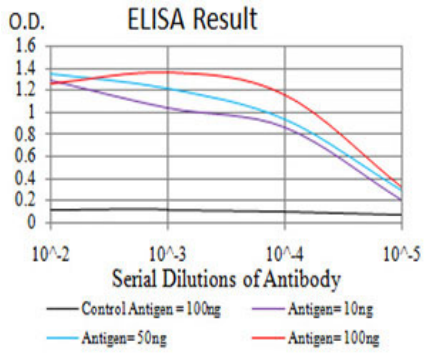
Gene ID	5080
Other Names	Paired box protein Pax-6, Aniridia type II protein, Oculorhombin, PAX6, AN2
Dilution	WB~~1/500 - 1/2000 IHC~~1/200 - 1/1000 FC~~1/200 - 1/400 E~~1/10000
Storage	Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.
Precautions	PAX6 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

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.

References

1.PLoS One. 2014 Jan 15;9(1):e85738.2.Curr Eye Res. 2012 Oct;37(10):879-83.

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