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Pax2 Recombinant Rabbit mAb

Catalog # AP99225

Product Information

Application	WB, IHC-P, IHC-F, IF
Primary Accession	Q02962
Other Accession	Q02962
Predicted	Rat, Human, Mouse
Host	Rabbit
Clonality	Recombinant
Calculated MW	44706
Physical State	Liquid
Immunogen	KLH conjugated synthetic peptide derived from human Pax2
Isotype	IgG
Purity	affinity purified by Protein A
Buffer	PBS (pH7.4), 0.1% BSA, 40% Glycerol. Preservative: 0.02% Proclin300.
SIMILARITY	Contains 1 paired domain.
SUBUNIT	Interacts with ELGN3; the interaction targets PAX2 for destruction.
DISEASE	Renal-coloboma syndrome (RCS) [MIM:120330]: An autosomal dominant disorder characterized by both ocular and renal anomalies, but may also include vesicoureteral reflux, high frequency hearing loss, central nervous system anomalies, and/or genital anomalies. Eye anomalies in this disorder consist of a wide and sometimes excavated dysplastic optic disk with the emergence of the retinal vessels from the periphery of the disk, designated optic nerve coloboma or 'morning glory' anomaly. Associated findings may include a small corneal diameter, retinal coloboma, sclera staphyloma, optic nerve cyst, microphthalmia, and pigmentary macular dysplasia. The kidneys are small and abnormally formed (renal hypodysplasia), and have fewer than the normal number of glomeruli, which are enlarged (oligomeganephronia). These ocular and renal anomalies result in decreased visual acuity and retinal detachment, as well as hypertension, proteinuria, and renal insufficiency that frequently progresses to end-stage renal disease. Note=The disease is caused by mutations affecting the gene represented in this entry. Note=Defects in PAX2 can be responsible for isolated renal hypodysplasia and oligomeganephronia (OMN). This is a rare congenital and usually sporadic anomaly characterized by bilateral renal hypoplasia, with a reduced number of enlarged nephrons and without urinary tract abnormalities.
Important Note	This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.
Background Descriptions	PAX2 encodes paired box gene 2, one of many human homologues of the Drosophila melanogaster gene prd. The central feature of this transcription factor gene family is the conserved DNA-binding paired box domain. PAX2 is believed to be a target of transcriptional supression by the tumor supressor gene WT1. Mutations within PAX2 have been shown to result in optic nerve colobomas and renal hypoplasia. Alternative splicing of this gene results in multiple transcript variants. [provided by RefSeq, Jul 2008]

Additional Information

Gene ID	5076
Other Names	FSGS7; PAPRS; PAX-2; Opdc; PAX2_HUMAN; PAX2; PAX2_MOUSE; paired box 2; paired box gene 2
Dilution	WB=1:500-2000,IHC-P=1:100-500,IHC-F=1:400-800,ICC/IF=1:50-100,IF=1:100-500,Flow-Cyt=1:50-100
Storage	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.

Protein Information

Name	PAX2
Function	Transcription factor that may have a role in kidney cell differentiation (PubMed:24676634). Has a critical role in the development of the urogenital tract, the eyes, and the CNS.
Cellular Location	Nucleus.
Tissue Location	Expressed in primitive cells of the kidney, ureter, eye, ear and central nervous system

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