

Product datasheet for **RC211996**

PAX2 (NM_003990) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	PAX2 (NM_003990) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	PAX2
Synonyms:	FSGS7; PAPRS
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



[View online »](#)

ORF Nucleotide Sequence:

>RC211996 representing NM_003990
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGGATCGCC**

ATGGATATGCACTGCAAAGCAGACCCCTTCTCCGCGATGCACCCAGGGCACGGGGGTGTGAACCAGCTCG
 GGGGGTGTTTGTGAACGGCCGGCCCTACCCGACGTGGTGAAGCAGCGCATCGTGGAGCTGGCCACCA
 GGGTGTGCGGCCCTGTGACATCTCCCGGACGTGCGGGTCAAGCCAGGCTGTGTGACAAAATCCTGGGC
 AGGTACTACGAGACCGGCAGCATCAAGCCGGGTGTGATCGGTGGCTCCAAGCCAAAAGTGGCGACGCCCA
 AAGTGGTGGACAAGATTGCTGAATACAAACGACAGAACCCGACTATGTTGCGCTGGGAGATTCGAGACCG
 GCTCCTGGCCGAGGGCATCTGTGACAATGACACAGTGCCAGCGTCTCTCCATCAACAGAATCATCCGG
 ACCAAAGTTCAGCAGCCTTCCACCCAACGCCGATGGGGCTGGGACAGGAGTGACCGCCCTGGCCACA
 CCATTGTTCCAGCAGCCTCCCTCTGTTCCAGCGCTCCAATGACCCAGTGGGATCTACTCCAT
 CAATGGGATCCTGGGATTCTCTGCTCCAATGGTGAAGAGAAACGTGATGAAGTTGAGGTATACACT
 GATCCTGCCACATTAGAGGAGTGGAGGTTGCATCTGGTCTGGACTTTAAGAGATGTGTCTGAGGGCT
 CAGTCCCCAATGGAGATCCAGAGTGGTGTGGACAGTTTGCAGGACACTTGCAGCTGACACCTTCCAC
 CCAGCAGCAGCTGGAAGCTTTGGATCGGGTCTTTGAGCGTCTTCTACCTGACGTCTTCCAGGCATCA
 GAGCACAATCAAATCAGAACAGGGGAACGAGTACTCCCTCCAGCCCTGACCCCTGGGCTTGATGAAGTCA
 AGTCGAGTCTATCTGCATCCACCAACCTGAGCTGGGCAGCAACGTGTGACGGCACACAGACATACCCAGT
 TGTGACTGGTCTGATCGGAGCACCCTCTGCTGGTTACCCCTCACGTGCCCCCACTGGCCAG
 GGAAGTACCCCACTCCACCTGGCAGGAATGGTGCCTGGGAGCGAGTTCTCCGGAACCCGTACAGCC
 ACCCCAGTACACGGCCTACAACGAGGCTTGAGATTGAGCAACCCCGCCTTACTAATGCCGCCCCCGG
 TCCGCCCCCTGCCCTGCTGCCGCTGCCTATGACCGCCACTAGTTACCGCGGGGACCACATCAAGCTTCAG
 GCCGACAGCTTCGGCTCCACATCGTCCCCGTC

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence:

>RC211996 representing NM_003990
 Red=Cloning site Green=Tags(s)

MDMHCKADPFSAMHPGHGGVNLGGVFNVRPLPDVVRQRIVELAHQGVRPCDISRQLRVSHGCVSKILG
 RYYETGSIKPGVIGGSKPKVATPKVVDKIAEYKRQNPMTFAWEIRDLLAEGICDNDTVPSVSSINRIIR
 TKVQQPFHPTPDGAGTGTAPGHTIVPSTASPPVSSASNDPVGSYSINGILGIPRSNGEKRRKREVEVYT
 DPAHIRGGGGLHLVWTLRDVSEGSVPNGDSQSGVDSLRLKHLRADTFTQQQLEALDRVFERPSYDPVFQAS
 EHIKSEQNEYSLPALTPGLDEVKSSLASTNPELGSNVSGTQTYPVVTGRDMASSTLPGYPPHPPTGQ
 GSYPTSTLAGMVPGESEFSGNPYSHPYTAYNEAWRF SNPALLMPPPGPPLPLPLPMTATSYRGDHIKLG
 ADSFGLHIVPV

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms:

https://cdn.origene.com/chromatograms/mk8059_d04.zip

Restriction Sites:

SgfI-MluI

Cloning Scheme:


ACCN: NM_003990

ORF Size: 1293 bp

OTI Disclaimer: The molecular sequence of this clone aligns with the gene accession number as a point of reference only. However, individual transcript sequences of the same gene can differ through naturally occurring variations (e.g. polymorphisms), each with its own valid existence. This clone is substantially in agreement with the reference, but a complete review of all prevailing variants is recommended prior to use. [More info](#)

OTI Annotation: This clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene.

Components: The ORF clone is ion-exchange column purified and shipped in a 2D barcoded Matrix tube containing 10ug of transfection-ready, dried plasmid DNA (reconstitute with 100 ul of water).

Reconstitution Method:

1. Centrifuge at 5,000xg for 5min.
2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.
3. Close the tube and incubate for 10 minutes at room temperature.
4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom.
5. Store the suspended plasmid at -20°C. The DNA is stable for at least one year from date of shipping when stored at -20°C.

RefSeq: [NM_003990.3](#)

RefSeq Size: 4257 bp

RefSeq ORF: 1299 bp

Locus ID: 5076

UniProt ID: [Q02962](#)

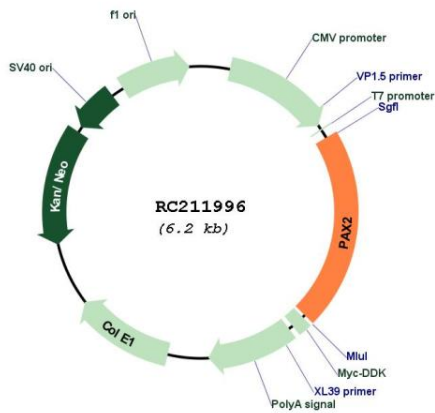
Cytogenetics: 10q24.31

Protein Families: Druggable Genome

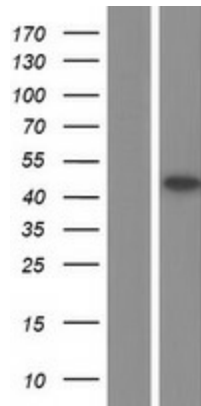
MW: 46.1 kDa

Gene Summary: 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 suppression by the tumor suppressor 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, Dec 2014]

Product images:



Circular map for RC211996



Western blot validation of overexpression lysate (Cat# [LY418303]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC211996 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).