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Product datasheet for RG218386

PAX2 (NM_003988) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	PAX2 (NM_003988) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	PAX2
Synonyms:	FSGS7; PAPRS
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)

ORF Nucleotide Sequence:

>RG218386 representing NM_003988
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCCGCGATCGCC

ATGGATATGCACTGCAAAGCAGACCCCTTCTCCGCGATGCACCCAGGGCACGGGGGTGTGAACCAGCTCG
GGGGGGTGTTTGTGAACGGCCGGCCCCTACCCGACGTGGTGAGGCAGCGCATCGTGGAGCTGGCCCACCA
GGGTGTGCGGCCCTGTGACATCTCCCGGCAGCTGCGGGTCAGCCACGGCTGTGTCAGCAAAATCCTGGGC
AGGTACTACGAGACCGGCAGCATCAAGCCGGGTGTGATCGGTGGCTCCAAGCCCAAAGTGGCGACGCCCA
AAGTGGTGGACAAGATTGCTGAATACAAACGACAGAACCCGACTATGTTCGCCTGGGAGATTCGAGACCG
GCTCCTGGCCGAGGGCATCTGTGACAATGACACAGTGCCCAGCGTCTCTTCCATCAACAGAATCATCCGG
ACCAAAGTTCAGCAGCCTTTCCACCCAACGCCGGATGGGGCTGGGACAGGAGTGACCGCCCCTGGCCACA
CCATTGTTCCCAGCACGGCCTCCCCTCCTGTTTCCAGCGCCTCCAATGACCCAGTGGGATCCTACTCCAT
CAATGGGATCCTGGGGATTCCTCGCTCCAATGGTGAGAAGAGGAAACGTGATGAAGATGTGTCTGAGGGC
TCAGTCCCCAATGGAGATTCCCAGAGTGGTGTGGACAGTTTGCGGAAGCACTTGCGAGCTGACACCTTCA
CCCAGCAGCAGCTGGAAGCTTTGGATCGGGTCTTTGAGCGTCCTTCCTACCCTGACGTCTTCCAGGCATC
AGAGCACATCAAATCAGAACAGGGGAACGAGTACTCCCTCCCAGCCCTGACCCCTGGGCTTGATGAAGTC
AAGTCGAGTCTATCTGCATCCACCAACCCTGAGCTGGGCAGCAACGTGTCAGGCACACAGACATACCCAG
TTGTGACTGGTCGTGACATGGCGAGCACCACTCTGCCTGGTTACCCCCCTCACGTGCCCCCCACTGGCCA
GGGAAGCTACCCCACCTCCACCCTGGCAGGAATGGTGCCTGAGGCTGCAGTTGGTCCCTCATCCTCCCTC
ATGAGCAAGCCGGGGAGGAAGCTTGCAGAAGTGCCCCCTTGTGTGCAACCCACTGGAGCGAGTTCTCCGG
CAACCCGTACAGCCACCCCCAGTACACGGCCTACAACGAGGCTTGGAGATTCAGCAACCCCGCCTTAC

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

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Protein Sequence:

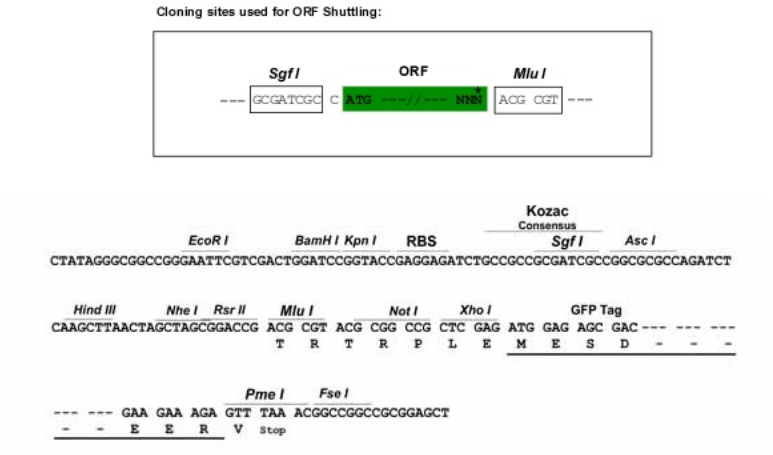
>RG218386 representing NM_003988
Red=Cloning site Green=Tags(s)

MDMHCKADPFSAMHPGHGGVNQLGGVFVNGRPLPDVVRQRIVELAHQGVRPCDISRQLRVSHGCVSKILG
RYYETGSIKPGVIGGSKPKVATPKVVDKIAEYKRQNPTMFAWEIRDRLLAEGICDNDTVPSVSSINRIIR
TKVQQPFHPTPDGAGTGVTAPGHTIVPSTASPPVSSASNDPVGSYSINGILGIPRSNGEKRKRDEDVSEG
SVPNGDSQSGVDSLRKHLRADTFTQQQLEALDRVFERPSYPDVFQASEHIKSEQGNEYSLPALTPGLDEV
KSSLSASTNPELGSNVSGTQTYPVVTGRDMASTTLPGYPPHVPPTGQGSYPTSTLAGMVPEAAVGPSSSL
MSKPGRKLAEVPPCVQPTGASSPATRTATPSTRPTTRLGDSATPPY

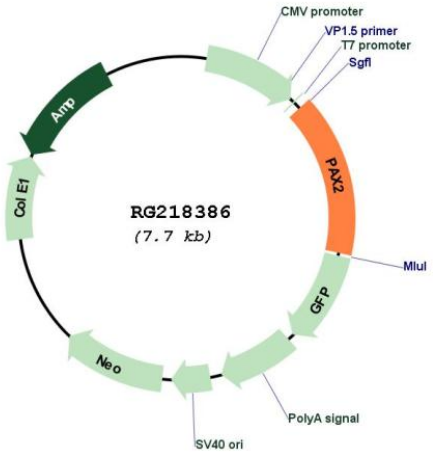
TRTRPLE – GFP Tag – V

Restriction Sites: SgfI-MluI

Cloning Scheme:



Plasmid Map:



ACCN: NM_003988

ORF Size:	1188 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_003988.5
RefSeq Size:	4290 bp
RefSeq ORF:	1191 bp
Locus ID:	5076
UniProt ID:	Q02962
Cytogenetics:	10q24.31
Protein Families:	Druggable Genome
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 supression 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]