

Product datasheet for **RG218551**

PAX2 (NM_003989) Human Tagged ORF Clone

Product data:

| | |
|---------------------------|---|
| Product Type: | Expression Plasmids |
| Product Name: | PAX2 (NM_003989) 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: | >RG218551 representing NM_003989 Red=Cloning site Blue=ORF Green=Tags(s) |

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGGATGCACTGCAAAGCAGACCCCTTCTCCGCGATGCACCCAGGGCACGGGGGTGTGAACCAGCTCG
GGGGGTGTTGTGAACGGCCGGCCCTACCCGACGTGGTGAGGCAGCGCATCGTGGAGCTGGCCACCA
GGGTGTGCGGCCCTGTGACATCTCCCGCAGCTGCGGGTCAGCCACGGCTGTGTCAGCAAATCCTGGG
AGGTACTACGAGACCGGCAGCATCAAGCCGGGTGTGATCGGTGGTCCAAGCCAAAGTGGCGACGCCA
AAGTGGTGGACAAGATTGCTGAATACAAACGACAGAACCCGACTATGTTTCGCTGGGAGATTCGAGACCG
GCTCCTGGCCGAGGGCATCTGTGACAATGACACAGTGCCAGCGTCTTCCATCAACAGAATCATCCGG
ACCAAAGTTCAGCAGCCTTCCACCCAACGCCGATGGGGCTGGGACAGGAGTGACCGCCCTGGCCACA
CCATTGTTCCAGCAGCGCTCCCTCCTGTTCCAGCGCTCCAATGACCCAGTGGGATCCTACTCCAT
CAATGGGATCCTGGGATTCCCTCGCTCCAATGGTGAGAAGAGGAAACGTGATGAAGATGTGTCTGAGGG
TCAGTCCCAATGGAGATTCAGAGTGGTGTGGACAGTTTGGGAAGCACTTGGAGCTGACACCTTCA
CCCAGCAGCAGCTGGAAGCTTTGGATCGGGTCTTTGAGCGTCTTCTACCCTGACGTCTTCCAGGCATC
AAGTCGAGTCTATCTGCATCCACCAACCTGAGCTGGGCAGCAAGTGTGACGACACAGACATACCCCA
TTGTGACTGGTCGTGACATGGCGAGCACCCTCTGCCTGGTTACCCCTCACGTGCCCCCACTGGCCA
GGGAAGCTACCCACCTCCACCCTGGCAGGAATGGTGCCTGGGAGCGAGTTCTCCGGCAACCCGTACAGC
CACCCAGTACACGGCCTACAACGAGGCTTGGAGATTGAGCAACCCCGCTTACTAATGCCGCCCCCG
GTCCGCCCTGCCGCTGCTGCCGCTGCCTATGACCGCCACTAGTTACCGCGGGACCACATCAAGCTTCA
GGCCGACAGCTTCGGCCTCCACATCGTCCCGTC

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA



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Protein Sequence: >RG218551 representing NM_003989
 Red=Cloning site Green=Tags(s)

MDMHCKADPFSAMHPGHGGVNQLGGVFNVRPLPDVVRQRIVELAHQGVPCDISRQLRVSHGCVSKILG
 RYYETGSIKPGVIGGSKPKVATPKVVDKIAEYKRQNPMTFAWEIRDRLLAEGICDNDTPSVSSINRIIR
 TKVQQPFHPTPDGAGTGVTAPGHTIVPSTASPPVSSASNDPVGYSINGILGIPRSNGEKRRKDEDVSEG
 SVPNGDSQSGVDSLRLKHLRADTFTQQLEALDRVFERPSYPDVFQASEHIKSEQGNEYSLPALTPGLDEV
 KSSLASATNPELGSNVSGTQTYPVVTGRDMASTTLPGYPPHVPPTGQGSYPTSTLAGMVPGEFSGNPYS
 HPQYTAINEAWRFSNPALLMPPPGPPLPLLPLPMTATSYRGDHIKLQADSFLGHIVPV

TRTRPLE - GFP Tag - V

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_003989

ORF Size: 1224 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_003989.3](#)

RefSeq Size: 4188 bp

RefSeq ORF: 1230 bp

Locus ID: 5076

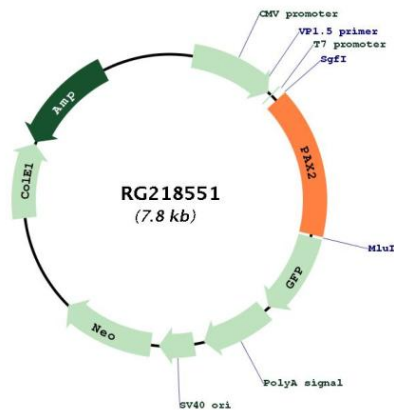
UniProt ID: [Q02962](#)

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 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 RG218551