

Product datasheet for **RG221271**

Wilms Tumor Protein (WT1) (NM_024424) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Wilms Tumor Protein (WT1) (NM_024424) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	Wilms Tumor Protein
Synonyms:	AWT1; GUD; NPHS4; WAGR; WIT-2; WT33
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)



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ORF Nucleotide Sequence:

>RG221271 representing NM_024424
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**GCGATCGCC**

CTGCAGGACCCGGCTTCCACGTGTGTCCTCCGGAGCCGGCGTCTCAGCACACGCTCCGCTCCGGGCCTGGGT
 GCCTACAGCAGCCAGAGCAGCAGGGAGTCCGGGACCCGGGCGGCATCTGGGCCAAGTTAGGCGCCGCCGA
 GGCCAGCGCTGAACGTCTCCAGGGCCGGAGGAGCCGCGGGGCGTCCGGGTCTGAGCCGACGAAATGGGC
 TCCGACGTGCGGGACCTGAACGCGCTGCTGCCCGCTCCCTCCCTGGGTGGCGCGCGGCTGTGCC
 TGCTGTGAGCGGCGCGGCGCAGTGGGCGCGGTGCTGGACTTTGCGCCCCGGGCGCTTCGGCTTACGG
 GTCGTTGGGCGGCCCCGCGCCGCCACCGGCTCCGCGCCACCCCCGCGCGCGCCCTACTCCTTCATC
 AAACAGGAGCCGAGCTGGGGCGGCGGAGCCGACGAGGAGCAGTGCCTGAGCGCCTTACTGTCCACT
 TTTCCGGCCAGTTCAGTGGCACAGCCGGAGCCTGTGCTACGGGCCCTTCGGTCTCCTCCGCCAGCCA
 GCGCTCATCCGGCCAGGCCAGGATGTTTCTAACGCGCCCTACCTGCCAGCTGCCTCGAGAGCCAGCCC
 GCTATTCGCAATCAGGGTTACAGCACGGTCACCTTCGACGGGACGCCAGCTACGGTCACACGCCCTCGC
 ACCATGCGGCGCAGTTCCCAACCACTATTCAAGCATGAGGATCCCATGGGCCAGCAGGGCTCGTGGG
 TGAGCAGCAGTACTCGGTGCCGCCCCGGTCTATGGTGCCACACCCCCACCGACAGCTGCACCGGCAGC
 CAGGCTTTGCTGCTGAGGACGCCCTACAGCAGTGACAATTTATACCAAATGACATCCCAGCTTGAATGCA
 TGACCTGGAATCAGATGAACTTAGGAGCCACCTTAAAGGGAGTTGCTGCTGGGAGCTCCAGCTCAGTGAA
 ATGGACAGAAGGGCAGAGCAACCACAGCACAGGGTACGAGAGCGATAACCACACAACGCCCATCCTCTGC
 GGAGCCCAATACAGAATACACACGACGGTGTCTTCAGAGGCATTGAGGATGTGCGACGTGTGCCGGAG
 TAGCCCCGACTTTGTACGGTCGGCATCTGAGACCAGTGAGAAACGCCCTTCATGTGTGCTTACCCAGG
 CTGCAATAAGAGATATTTTAAGCTGTCCCACTTACAGATGCACAGCAGGAAGCACACTGGTGAGAAACCA
 TACCAGTGTGACTTCAAGGACTGTGAACGAAGTTTTCTCGTTCAGACCAGCTCAAAAGACACAAAGGA
 GACATACAGGTGTGAAACCATTCCAGTGTAAACTTGTGACGAAAGTTCTCCCGTCCGACCACCTGAA
 GACCCACACCAGGACTCATACAGGTGAAAAGCCCTTCAGCTGTGCGGTGGCCAAGTTGTCAGAAAAAGTTT
 GCCCGTCCAGATGAATTAGTCCGCCATCACAACATGCATCAGAGAAACATGACCAAACCTCCAGCTGGCGC
 TT

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

Protein Sequence:

>RG221271 representing NM_024424
 Red=Cloning site Green=Tags(s)

LQDPASTCVPEPASQHTLRSGPGCLQPEQQVDRDPGGIWAALGAAEASAERLQGRRSRGASGSEPPQMG
 SDVRDLNALLPAVPSLGGGGCALPVSGAAQWAPVLDFAAPPASAYGSLGGPAPPAPPPPPPPPHSFI
 KQEPSWGAEPHEEQCLSAFTVHFSGQFTGTAGACRYGPFPPPPSQASSGQARMFPNAPYLPSCLESQP
 AIRNQYSTVTFDGTSPSYGHTPSHAAQFPNHSFKHEDPMGQQGSLGEQQYSVPPPVYGCHTPTDSTGSG
 QALLLRTPYSSDNLQMTSQLECMWNQMLGATLKGVAAGSSSVKWTGQSNHSTGYESDNHTTPILC
 GAQYRIHTHGVRGIQDVRVPVGVAPTLVRSASETSEKRPFMCAYPGCNKRYFKLSHLQMSRKHTGEKP
 YQCDFKDCERRFSRSDQLKRHRHTGVKPFQCKTCQRKFSRSDHLKTHTRHTGEKPFSCRWPSQKFK
 ARSDELVRHNMHQNMTKLQLAL

TRTRPLE - GFP Tag - V

Restriction Sites:

Sgfl-MluI

Cloning Scheme:


ACCN: NM_024424

ORF Size: 1542 bp

OTI Disclaimer: Due to the inherent nature of this plasmid, standard methods to replicate additional amounts of DNA in E. coli are highly likely to result in mutations and/or rearrangements. Therefore, OriGene does not guarantee the capability to replicate this plasmid DNA. Additional amounts of DNA can be purchased from OriGene with batch-specific, full-sequence verification at a reduced cost. Please contact our customer care team at custsupport@origene.com or by calling 301.340.3188 option 3 for pricing and delivery.

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).

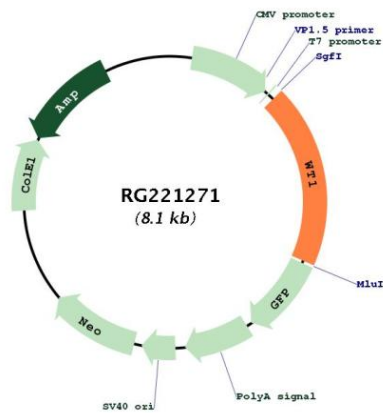
- Reconstitution Method:**
1. Centrifuge at 5,000xg for 5min.
 2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.
 3. Close the tube and incubate for 10 minutes at room temperature.
 4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the 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_024424.3](#)

RefSeq Size: 3020 bp
RefSeq ORF: 1560 bp
Locus ID: 7490
UniProt ID: [P19544](#)
Cytogenetics: 11p13
Protein Families: Druggable Genome, Transcription Factors

Gene Summary: This gene encodes a transcription factor that contains four zinc-finger motifs at the C-terminus and a proline/glutamine-rich DNA-binding domain at the N-terminus. It has an essential role in the normal development of the urogenital system, and it is mutated in a small subset of patients with Wilms tumor. This gene exhibits complex tissue-specific and polymorphic imprinting pattern, with biallelic, and monoallelic expression from the maternal and paternal alleles in different tissues. Multiple transcript variants have been described. In several variants, there is evidence for the use of a non-AUG (CUG) translation initiation codon upstream of, and in-frame with the first AUG. Authors of PMID:7926762 also provide evidence that WT1 mRNA undergoes RNA editing in human and rat, and that this process is tissue-restricted and developmentally regulated. [provided by RefSeq, Mar 2015]

Product images:



Circular map for RG221271