

Product datasheet for **RC220142**

Wilms Tumor Protein (WT1) (NM_024426) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Wilms Tumor Protein (WT1) (NM_024426) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Wilms Tumor Protein
Synonyms:	AWT1; GUD; NPHS4; WAGR; WIT-2; WT33
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



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ORF Nucleotide Sequence:

>RC220142 representing NM_024426
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGCATCGCC**

ATGCAGGACCCGGCTTCCACGTGTGCCGGAGCCGGCGTCTCAGCACACGCTCCGCTCCGGCCCTGGGT
 GCCTACAGCAGCCAGAGCAGCAGGGAGTCCGGGACCCGGGCGGCATCTGGGCAAGTTAGGCGCCGCCGA
 GGCCAGCGCTGAACGTCTCCAGGGCCGGAGGAGCCGCGGGGCGTCCGGGTCTGAGCCGACGAAATGGGC
 TCCGACGTGCGGGACCTGAACGCGCTGCTGCCCGCTCCCTCCCTGGGTGGCGCGCGGCTGTGCC
 TGCCTGTGAGCGGCGCGGCAGTGGGCGCGGTGCTGGACTTTGCGCCTCCGGGCGCTTCGGCTTACGG
 GTCGTTGGGCGGCCCGCGCCACCGGCTCCGCGCCACCCCGCGCGCGCCCTACTCCTTCATC
 AAACAGGAGCCGAGCTGGGCGGCGGGAGCCGACGAGGAGCAGTGCCTGAGCGCCTTACTGTCCACT
 TTTCCGGCCAGTTCAGTGCACAGCCGGAGCCTGTGCTACGGGCCCTTCGGTCTCTCCGCCAGCCA
 GCGCTCATCCGGCCAGGCCAGGATGTTTCTAACGCGCCCTACCTGCCAGCTGCCTGAGAGCCAGCCC
 GCTATTCGCAATCAGGGTTACAGCACGGTACCTTCGACGGGACGCCAGCTACGGTACACAGCCCTCGC
 ACCATGCGGCGCAGTTCCCAACCACTATTCAAGCATGAGGATCCCATGGGCCAGCAGGGCTCGTGGG
 TGAGCAGCAGTACTCGGTGCCGCCCCGGTCTATGGTGCACACCCCCACCGACAGCTGCACCGGCAGC
 CAGGCTTTGCTGCTGAGGACGCCCTACAGCAGTGACAATTTATACCAAATGACATCCCAGCTTGAATGCA
 TGACCTGGAATCAGATGAACTTAGGAGCCACCTTAAAGGGAGTTGCTGCTGGGAGCTCCAGCTCAGTGAA
 ATGGACAGAAGGGCAGAGCAACCACAGCACAGGGTACGAGAGCGATAACCAACAACGCCCATCCTCTGC
 GGAGCCCAATACAGAATACACAGCACGGTGTCTTCAGAGGCATTACAGATGTGCGACGTGTGCCGGAG
 TAGCCCCGACTTTGTACGGTCGGCATCTGAGACCAGTGAGAAACGCCCTTCATGTGTGCTTACCCAGG
 CTGCAATAAGAGATATTTTAAGCTGTCCCACTACAGATGCACAGCAGGAAGCACACTGGTGAGAAACCA
 TACCAGTGTGACTTCAAGGACTGTGAACGAAGTTTTCTCGTTCAGACCAGCTCAAAAGACACAAAGGA
 GACATACAGGTGTGAAACCATTCCAGTGTAAACTTGTGACGAAAGTTCTCCGGTCCGACCACCTGAA
 GACCCACACCAGGACTCATACAGGTAAAACAAGTAAAAGCCCTTCAGCTGTCCGTGGCCAAAGTTGTGAG
 AAAAAGTTTGCCCGTCCAGATGAATTAGTCCGCCATCACAAATGCATCAGAGAAACATGACCAAACCTCC
 AGCTGGCGCTT

ACGCGTACGCGGCGGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence:

>RC220142 representing NM_024426
 Red=Cloning site Green=Tags(s)

MQDPASTCVPEPASQHTLRSGPGCLQQPEQQGVRDPGGIWAJLGAEEASAERLQRRSRGASGSEPQQMG
 SDVRDLNALLPAVPSLGGGGCALPVSGAAQWAPVLDFAAPPASAYGSLGGPAPPAPPPPPPPPHSFI
 KQEPSWGAEPHEEQCLSAFTVHFSGFTGTAGACRYGPFPPPPSQASSGQARMFPNAPYLPSCLSQP
 AIRNQYSTVTFDGTSPSYGHTPSHAAQFPNHSFKHEDPMGQQGSLGEQQYSVPPPVYGHPTDSTGTS
 QALLLRTPYSSDNLQMTSQLCMTWNQMLGATLKGVAAGSSSVKWTGQSNHSTGYESDNHTTPILC
 GAQYRIHTHGVRGIQDVRVPGVAPTLVRSASETSEKRPFMCAYPGCNKRYFKLSHLQMSRKHTGKPK
 YQCDFKDCERRFSRSDQLKRHRHTGVKPFQCKTCQRKFSRSDHLKTHTRHTGKTSEKPFSCRWPSCQ
 KKFARSDELVRHHNMHQRNMTKLQLAL

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms:

https://cdn.origene.com/chromatograms/mg3975_f02.zip

Restriction Sites:

Sgfl-MluI

Cloning Scheme:


ACCN: NM_024426

ORF Size: 1551 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_024426.5](#)

RefSeq Size: 3037 bp

RefSeq ORF: 1569 bp

Locus ID: 7490

UniProt ID: [P19544](#)

Cytogenetics: 11p13

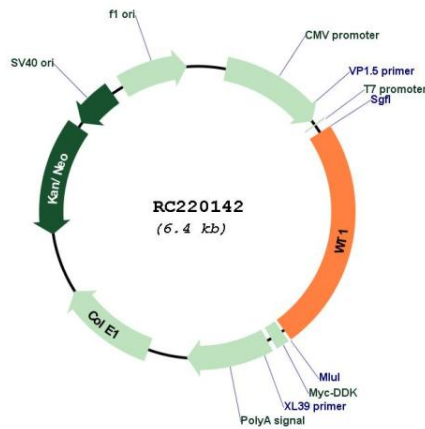
Domains: WT1, zf-C2H2

Protein Families: Druggable Genome, Transcription Factors

MW: 56.3 kDa

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 RC220142