

Product datasheet for RC231130

OriGene Technologies, Inc.

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Wilms Tumor Protein (WT1) (NM_001198552) Human Tagged ORF Clone

Product data:

Product Type: Expression Plasmids

Product Name: Wilms Tumor Protein (WT1) (NM_001198552) Human Tagged ORF Clone

Tag: Myc-DDK

Symbol: Wilms Tumor Protein

Synonyms: AWT1; GUD; NPHS4; WAGR; WIT-2; WT33

Mammalian Cell Neomycin

Selection:

Vector: pCMV6-Entry (PS100001)

E. coli Selection: Kanamycin (25 ug/mL)

ORF Nucleotide >RC231130 representing NM_001198552
Sequence: Red=Cloning site Blue=ORF Green=Tags(s)

 ${\tt TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC}$

GCCGCGATCGCC

ATGGAGAAGGGTTACAGCACGGTCACCTTCGACGGGACGCCCAGCTACGGTCACACGCCCTCGCACCATG
CGGCGCAGTTCCCCAACCACTCATTCAAGCATGAGGATCCCATGGGCCAGCAGGGCTCGCTGGGTGAGCA
GCAGTACTCGGTGCCGCCCCCGGTCTATGGCTGCCACACCCCCACCGACAGCTGCACCGGCAGCCAGGCT
TTGCTGCTGAGGACGCCCTACAGCAGTGACAATTTATACCAAATGACATCCCAGCTTGAATGCATGACCT
GGAATCAGATGAACTTAGGAGCCACCCTTAAAGGGCCACAGCACAGGGTACGAGAGCGATAACCACACAC
GCCCATCCTCTGCGGAGCCCAATACAGAATACACACCGCACGGTGTCTTCAGAGGCATTCAGGATGTGCGA
CGTGTGCCTGGAGTAGCCCCGACTCTTGTACGGTCGGCATCTGAGACCAGTGAGAAACGCCCCTTCATGT
GTGCTTACCCAGGCTGCAATAAGAGATATTTTAAGCTGTCCCACTTACAGATGCACAGCAGGAAGCACAC
TGGTGAGAAACCATACCAGTGTGACTTCAAGGACTGTGAACGAAGGTTTTCTCGTTCAGACCAGCTCAAA
AGACACCAAAGGAGACATACAGGTTGAAACCATTCCAGTGTAAAACTTGTCAGCGAAAGTTCTCCCGGT
CCGACCACCTGAAGACCCACCCAGGACTCATACAGGTAAAACAAGTGAAAAAGCCCTTCAGCTGTCGGTG
GCCAAGTTGTCAGAAAAAAGTTTGCCCGGTCAGATGAATTAGTCCGCCATCACAACATGCATCAGAGAAAC
ATGACCAAAACTCCAGCTGGCGCTT

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT ACAAGGATGACGACGATAAGGTTTAA





Protein Sequence: >RC231130 representing NM_001198552

Red=Cloning site Green=Tags(s)

MEKGYSTVTFDGTPSYGHTPSHHAAQFPNHSFKHEDPMGQQGSLGEQQYSVPPPVYGCHTPTDSCTGSQA LLLRTPYSSDNLYQMTSQLECMTWNQMNLGATLKGHSTGYESDNHTTPILCGAQYRIHTHGVFRGIQDVR RVPGVAPTLVRSASETSEKRPFMCAYPGCNKRYFKLSHLQMHSRKHTGEKPYQCDFKDCERRFSRSDQLK RHQRRHTGVKPFQCKTCQRKFSRSDHLKTHTRTHTGKTSEKPFSCRWPSCQKKFARSDELVRHHNMHQRN MTKLQLAL

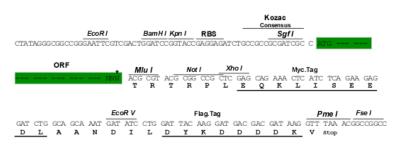
TRTRPLEQKLISEEDLAANDILDYKDDDDK**V**

Restriction Sites:

Sgfl-Mlul

Cloning Scheme:





^{*} The last codon before the Stop codon of the ORF

ACCN: NM_001198552

ORF Size: 864 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).



Cytogenetics:

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 001198552.2

 RefSeq ORF:
 867 bp

 Locus ID:
 7490

 UniProt ID:
 P19544

Protein Families: Druggable Genome, Transcription Factors

11p13

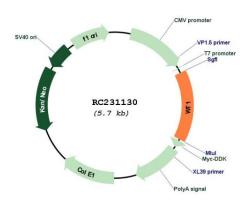
MW: 33.5 kDa

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-

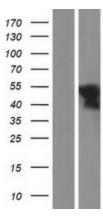
restricted and developmentally regulated. [provided by RefSeq, Mar 2015]

Product images:



Circular map for RC231130





Western blot validation of overexpression lysate (Cat# [LY434129]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC231130 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).