

Product datasheet for SC308799

OriGene Technologies, Inc.

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Wilms Tumor Protein (WT1) (NM_024426) Human Untagged Clone

Product data:

Product Type: Expression Plasmids

Product Name: Wilms Tumor Protein (WT1) (NM_024426) Human Untagged Clone

Tag: Tag Free

Symbol: Wilms Tumor Protein

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

Mammalian Cell

Selection:

None

Vector: pCMV6-XL4

E. coli Selection: Ampicillin (100 ug/mL)

Fully Sequenced ORF: >OriGene ORF sequence for NM_024426 edited

CTGCAGGACCCGGCTTCCACGTGTGTCCCGGAGCCGGCGTCTCAGCACACGCTCCGCTCC GGGCCTGGGTGCCTACAGCAGCCAGAGCAGCAGGGAGTCCGGGACCCGGGCGGCATCTGG GCCAAGTTAGGCGCCGCGAGGCCAGCGCTGAACGTCTCCAGGGCCGGAGGAGCCGCGGG GCGTCCGGGTCTGAGCCGCAGCAAATGGGCTCCGACGTGCGGGACCTGAACGCGCTGCTG CCCGCCGTCCCTCCCTGGGTGGCGGCGGCGGCTGTGCCTGCCTGTGAGCGGCGCGCG CAGTGGGCGCCGGTGCTGGACTTTGCGCCCCCGGGCGCTTCGGCTTACGGGTCGTTGGGC GGCCCGCGCCGCCACCGGCCGCCGCCGCCGCCGCCGCCTCACTCCTTCATC AAACAGGAGCCGAGCTGGGGCGCGCGGAGCCGCACGAGGAGCAGTGCCTGAGCGCCTTC ACTGTCCACTTTTCCGGCCAGTTCACTGGCACAGCCGGAGCCTGTCGCTACGGGCCCTTC GGTCCTCCTCCGCCCAGCCAGGCGTCATCCGGCCAGGCCAGGATGTTTCCTAACGCGCCC TACCTGCCCAGCTGCCTCGAGAGCCAGCCCGCTATTCGCAATCAGGGTTACAGCACGGTC ACCTTCGACGGGACGCCCAGCTACGGTCACACGCCCTCGCACCATGCGGCGCAGTTCCCC AACCACTCATTCAAGCATGAGGATCCCATGGGCCAGCAGGGCTCGCTGGGTGAGCAGCAG TACTCGGTGCCGCCCCGGTCTATGGCTGCCACACCCCCACCGACAGCTGCACCGGCAGC CAGGCTTTGCTGCTGAGGACGCCCTACAGCAGTGACAATTTATACCAAATGACATCCCAG CTTGAATGCATGACCTGGAATCAGATGAACTTAGGAGCCACCTTAAAGGGAGTTGCTGCT GGGAGCTCCAGCTCAGTGAAATGGACAGAAGGGCAGAGCAACCACAGCACAGGGTACGAG GTCTTCAGAGGCATTCAGGATGTGCGACGTGTGCCTGGAGTAGCCCCGACTCTTGTACGG TCGGCATCTGAGACCAGTGAGAAACGCCCCTTCATGTGTGCTTACCCAGGCTGCAATAAG AGATATTTTAAGCTGTCCCACTTACAGATGCACAGCAGGAAGCACACTGGTGAGAAACCA TACCAGTGTGACTTCAAGGACTGTGAACGAAGGTTTTCTCGTTCAGACCAGCTCAAAAGA CACCAAAGGAGACATACAGGTGTGAAACCATTCCAGTGTAAAACTTGTCAGCGAAAGTTC TCCCGGTCCGACCACCTGAAGACCCACACCAGGACTCATACAGGTAAAACAAGTGAAAAG CCCTTCAGCTGTCGGTGGCCAAGTTGTCAGAAAAAGTTTGCCCGGTCAGATGAATTAGTC CGCCATCACAACATGCATCAGAGAAACATGACCAAACTCCAGCTGGCGCTTTGA

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Restriction Sites: Please inquire

ACCN: NM_024426

Insert Size: 3000 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 customercom 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 TrueClone is provided through our Custom Cloning Process that includes sub-cloning

into OriGene's pCMV6 vector and full sequencing to provide a non-variant match to the expected reference without frameshifts, and is delivered as lyophilized plasmid DNA

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: <u>NM 024426.3</u>, <u>NP 077744.3</u>

 RefSeq Size:
 3029 bp

 RefSeq ORF:
 1554 bp

 Locus ID:
 7490

 UniProt ID:
 P19544

 Cytogenetics:
 11p13

Domains: WT1, zf-C2H2

Protein Families: Druggable Genome, Transcription Factors



Gene Summary:

This gene encodes a transcription factor that contains four zinc-finger motifs at the Cterminus 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]
Transcript Variant: This variant (D) represents the longest transcript and encodes the longest isoform (D). It initiates translation from a non-AUG (CUG) site, and also from a downstream, in-frame AUG. CCDS Note: The coding region has been updated to start at a non-AUG translation start codon that is supported by a publication and protein conservation.