

Product datasheet for **SC300060**

Wilms Tumor Protein (WT1) (NM_000378) Human Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Wilms Tumor Protein (WT1) (NM_000378) Human Untagged Clone
Tag:	Tag Free
Symbol:	Wilms Tumor Protein
Synonyms:	AWT1; GUD; NPHS4; WAGR; WIT-2; WT33
Mammalian Cell Selection:	None
Vector:	<u>pCMV6-XL5</u>
E. coli Selection:	Ampicillin (100 ug/mL)

Fully Sequenced ORF: >OriGene ORF sequence for NM_000378 edited
 CTGCAGGACCCGGCTTCCACGTGTGTCCCGGAGCCGGCGTCTCAGCACACGCTCCGCTCC
 GGGCCTGGGTGCCTACAGCAGCCAGAGCAGCAGGGAGTCCGGGACCCGGGCGGCATCTGG
 GCCAAGTTAGGCGCCCGGAGGCCAGCGCTGAACGTCTCCAGGGCCGGAGGAGCCGCGGG
 GCGTCCGGGTCTGAGCCGAGCAAAATGGGCTCCGACGTGCGGGACCTGAACGCGCTGCTG
 CCCGCCGCTCCCCTCCCTGGGTGGCGGCGGGGCTGTGCCCTGCCTGTGAGCGGCGCGGG
 CAGTGGGCGCCGGTGTGGACTTTGCGCCTCCGGGCGCTTCGGCTTACGGGTGCTGGGC
 GGCCCCGCGCCGACCCGGCTCCGCCGCCACCCCGCCGCGCCGCTCACTCCTTCATC
 AAACAGGAGCCGAGCTGGGGCGGCGGGAGCCGACGAGGAGCAGTGCCTGAGCGCCTTC
 ACTGTCCACTTTTCCGGCCAGTTCACTGGCACAGCCGGAGCCTGTGCTACGGGCCCTTC
 GGTCTCTCCGCCAGCCAGGCGTCATCCGGCCAGGCCAGGATGTTTCTAACGCGCCC
 TACCTGCCAGCTGCCTCGAGAGCCAGCCCGCTATTTCGAATCAGGGTTACAGCACGGTC
 ACCTTCGACGGGACGCCAGCTACGGTCACACGCCCTCGCACCATGCGGGCAGTTCCCC
 AACCACTCATTCAAGCATGAGGATCCCATGGGCCAGCAGGGCTCGCTGGGTGAGCAGCAG
 TACTCGGTGCCGCCCCGGTCTATGGCTGCCACACCCACCCGACAGCTGCACCGGCAGC
 CAGGCTTTGCTGCTGAGGACGCCCTACAGCAGTGACAATTTATACCAAATGACATCCCAG
 CTTGAATGCATGACCTGGAATCAGATGAACTTAGGAGCCACCTTAAAGGGCCACAGCACA
 GGGTACGAGAGCGATAACCACACAACGCCATCCTCTGCGGAGCCCAATACAGAATACAC
 ACGCACGGTGTCTTCAGAGGCATTCAAGGATGTGCGGCGTGTGCCCTGGAGTAGCCCGGACT
 CTGTACGGTCCGCATCTGAGACCAAGTGAAGAACGCCCCCTTCATGTGTGCTTACCCAGGC
 TGCAATAAGAGATATTTTAAAGCTGTCCCACTTACAGATGCACAGCAGGAAGCACACTGGT
 GAGAAACCATAACAGTGTGACTTCAAGGACTGTGAACGAAGTTTTCTCGTTCAGACCAG
 CTCAAAAGACACCAAAGGAGACATACAGGTGTGAAACCATTCAGTGTAAAATTGTCAG
 CGAAAGTTCTCCCGGTCCGACCCTGAAGACCCACACCAGGACTCATAAGGTGAAAAG
 CCCTTCAGCTGTCGGTGGCCAAGTTGTGAGAAAAAGTTTGCCCGTCCAGTGAATTAGTC
 CGCCATCACAAATGCATCAGAGAAACATGACCAAACTCCAGCTGGCGCTTGA



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Restriction Sites:	Please inquire
ACCN:	NM_000378
Insert Size:	3000 bp
OTI Disclaimer:	Our molecular clone sequence data has been matched to the reference identifier above as a point of reference. Note that the complete sequence of our molecular clones may differ from the sequence published for this corresponding reference, e.g., by representing an alternative RNA splicing form or single nucleotide polymorphism (SNP).
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:	<ol style="list-style-type: none">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_000378.3</u> , <u>NP_000369.3</u>
RefSeq Size:	2969 bp
RefSeq ORF:	1494 bp
Locus ID:	7490
UniProt ID:	<u>P19544</u>
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]

Transcript Variant: This variant (A) lacks an alternate in-frame exon and uses an alternate, in-frame splice site in the 3' coding region, compared to variant D. This results in a shorter protein (isoform A), compared to 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.