

## Product datasheet for **KN220079**

### Wilms Tumor Protein (WT1) Human Gene Knockout Kit (CRISPR)

#### Product data:

Product Type:	Knockout Kits (CRISPR)
Format:	2 gRNA vectors, 1 GFP-puro donor, 1 scramble control
Donor DNA:	GFP-puro
Symbol:	Wilms Tumor Protein
Locus ID:	7490
Components:	<b>KN220079G1</b> , Wilms Tumor Protein gRNA vector 1 in pCas-Guide CRISPR vector (GE100002), Target Sequence: TTCCACGTGTGTCCCGGAGC <b>KN220079G2</b> , Wilms Tumor Protein gRNA vector 2 in pCas-Guide CRISPR vector (GE100002), Target Sequence: CGGAGCGTGTGCTGAGACGC <b>KN220079D</b> , donor DNA containing left and right homologous arms and GFP-puro functional cassette.

Homologous arm and GFP-puro sequences:

pUC vector backbone in gray; **Left arm sequence in blue**; **GFP-puro in green**; **Right arm in violet**

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AGAAGTAAGT TGGCCGAGT GTTATCACTC ATGGTTATGG CAGCACTGCA TAATTCTCTT ACTGTCATGC
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 TAGTTTGCGC AACGTTGTTG CCATTGCTAC AGGCATCGTG GTGTCACGCT CGTCGTTTGG TATGGCTTCA  
 TTCAGCTCCG GTTCCCAACG ATC

**GE100003**, scramble sequence in pCas-Guide vector

**Disclaimer:**

These products are manufactured and supplied by OriGene under license from ERS. The kit is designed based on the best knowledge of CRISPR technology. The system has been functionally validated for knocking-in the cassette downstream the native promoter. The efficiency of the knock-out varies due to the nature of the biology and the complexity of the experimental process.

**RefSeq:**

[NM\\_000378](#), [NM\\_001198551](#), [NM\\_001198552](#), [NM\\_024424](#), [NM\\_024425](#), [NM\\_024426](#),  
[NM\\_001367854](#), [NR\\_160306](#)

**UniProt ID:**

[P19544](#)

**Synonyms:**

AWT1; EWS-WT1; GUD; NPHS4; WAGR; WIT-2; WT33

**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:

