

## Active Recombinant Human WT1, Flag-tagged

**Cat. No.** WT1-1199H    **Lot. No.** (See product label)

### SPECIFICATION

**Product Overview**      The N-terminal Flag-tagged WT-1 protein (residue 1-446, including exon 5 but without KTS) was expressed in a baculovirus system and purified by affinity and FPLC chromatography.

**Species**      Human

**Source**      Insect Cells

**ProteinLength**      1-446 a.a.

**Description**      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 Wilm's tumors. 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 site 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.

**Bio-activity**      1 unit equals 1 nanogram of protein. 2-10 units are sufficient for a gel mobility shift assay in a 20µreaction. 50-200 units are required for a reconstituted transcription

 Tel: 1-631-559-9269    1-516-512-3133

 Email: [info@creative-biomart.com](mailto:info@creative-biomart.com)     Fax: 1-631-938-8127

 45-1 Ramsey Road, Shirley, NY 11967, USA

assay and 100 units are sufficient for a protein-protein interaction assay.

**Molecular Mass** 55.7 kDa.

**Purity** Purified protein is greater than 95% homogeneous based on SDS-PAGE analysis.

**Applications** Recombinant WT-1 protein can be used for: 1) in vitro function studies including transcription, DNA or RNA binding assays; 2) protein-protein interaction assay; and 3) cell growth and proliferation assays.

**Storage Buffer** 20 mM Tris-Cl (pH 8.0), 20% Glycerol, 100 mM KCl, 1 mM DTT and 0.2 mM EDTA

## GENE INFORMATION

**Gene Name** [WT1 Wilms tumor 1 \[ Homo sapiens \(human\) \]](#)

**Official Symbol** WT1

**Synonyms** WT1; GUD; AWT1; WAGR; WT33; NPHS4; WIT-2; EWS-WT1; Wilms tumor 1; Wilms tumor protein; amino-terminal domain of EWS|last three zinc fingers of the DNA-binding domain of WT1

**Gene ID** [7490](#)

**mRNA Refseq** [NM\\_000378](#)

**Protein Refseq** [NP\\_000369](#)

**MIM** [607102](#)

**UniProt ID** P19544

 Tel: 1-631-559-9269 1-516-512-3133

 Email: [info@creative-biomart.com](mailto:info@creative-biomart.com)  Fax: 1-631-938-8127

 45-1 Ramsey Road, Shirley, NY 11967, USA

<b>Chromosome Location</b>	11p13
<b>Pathway</b>	Integrated Pancreatic Cancer Pathway; Regulation of Telomerase; Transcriptional misregulation in cancer
<b>Function</b>	C2H2 zinc finger domain binding; RNA binding; RNA polymerase II core promoter proximal region sequence-specific DNA binding transcription factor activity involved in positive regulation of transcription

 Tel: 1-631-559-9269 1-516-512-3133

 Email: [info@creative-biomart.com](mailto:info@creative-biomart.com)  Fax: 1-631-938-8127

 45-1 Ramsey Road, Shirley, NY 11967, USA