

Active Recombinant Human Wilms Tumor 1

Cat. No. WT1-1210H **Lot. No.** (See product label)

SPECIFICATION

Product Overview

Species Human

Source Sf9 Cells

Description

WT-1, the product of Wilms' Tumor suppressor gene Wt1, is a nuclear protein with structural motifs characteristic of transcription factors, including four C-terminal zinc fingers. While different pre-mRNA processing could result in 16 isoforms of the protein, the inclusion or exclusion of exon 5 and three amino acids (KTS) between zinc fingers 3 and 4 largely affects the activity of the WT-1 protein. Such a complex posttranscriptional regulation, particularly in splicing, may represent a major regulatory mechanism for tumorigenesis of the Wilms' tumor. With the inclusion of exon 5, WT-1 (+KTS) binds to both DNA and RNA and is RNase but not DNase sensitive. This form also colocalizes with splicing factor in a speckled nuclear particle, suggesting that WT-1 protein may function as both a transcription factor and a splicing regulator. The WT-1 protein (residue 1-449, including exon 5 and KTS) is expressed in baculovirus system and purified by an affinity column in combination with FPLC chromatography.

Form Liquid. Supplied in 20 mM Tris-HCl pH 8.0, 100 mM KCl, 0.2 mM EDTA, 1 mM DTT and 20% glycerol.

Purity ≥95% by SDS-PAGE.

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Activity	1 ng is the amount sufficient for a gel mobility shift assay in a 20 µl reaction, 50 ng are sufficient for reconstituted transcription assays and 100 ng are sufficient for a protein-protein interaction assay.
Usage	For in vitro use only.
Storage	Quality guaranteed for 12 months store at - 80°C. Avoid freeze / thaw cycles.
GENE INFORMATION	
Gene Name	WT1 Wilms tumor 1 [Homo sapiens]
Synonyms	WT1; Wilms tumor 1; GUD; AWT1; WAGR; WT33; WIT-2; OTTHUMP00000037553;Wilms tumor protein
Gene ID	7490
mRNA Refseq	NM_000378
Protein Refseq	NP_000369
MIM	607102
UniProt ID	Q8IYZ5
Chromosome Location	11p13
Function	RNA binding; double-stranded DNA binding; metal ion binding; promoter binding; protein binding; transcription activator activity; transcription factor activity; zinc ion binding

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