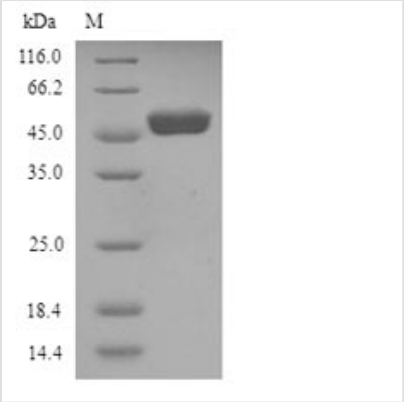
Recombinant Human Wilms tumor protein (WT1)

Product Code	CSB-YP026158HU
Relevance	Transcription factor that plays an important role in cellular development and cell survival. Regulates the expression of numerous target genes, including EPO. Plays an essential role for development of the urogenital system. Recognizes and binds to the DNA sequence 5'-CGCCCCCGC-3'. It has a tumor suppressor as well as an oncogenic role in tumor formation. Function may be isoform-specific: isoforms lacking the KTS motif may act as transcription factors. Isoforms containing the KTS motif may bind mRNA and play a role in mRNA metabolism or splicing. Isoform 1 has lower affinity for DNA, and can bind RNA.
Abbreviation	Recombinant Human WT1 protein
Storage	The shelf life is related to many factors, storage state, buffer ingredients, storage temperature and the stability of the protein itself. Generally, the shelf life of liquid form is 6 months at -20°C/-80°C. The shelf life of lyophilized form is 12 months at -20°C/-80°C.
Uniprot No.	P19544
Alias	WT33
Product Type	Recombinant Protein
Immunogen Species	Homo sapiens (Human)
Purity	Greater than 90% as determined by SDS-PAGE.
Sequence	MGSDVRDLNALLPAVPSLGGGGGCALPVSGAAQWAPVLDFAPPGASAYGSL GGPAPPPAPPPPPPPPPHSFIKQEPSWGGAEPHEEQCLSAFTVHFSGQFTGT AGACRYGPFGPPPPSQASSGQARMFPNAPYLPSCLESQPAIRNQGYSTVTFD GTPSYGHTPSHHAAQFPNHSFKHEDPMGQQGSLGEQQYSVPPPVYGCHTPT DSCTGSQALLLRTPYSSDNLYQMTSQLECMTWNQMNLGATLKGVAAGSSSS VKWTEGQSNHSTGYESDNHTTPILCGAQYRIHTHGVFRGIQDVRRVPGVAPTL VRSASETSEKRPFMCAYPGCNKRYFKLSHLQMHSRKHTGEKPYQCDFKDCE RRFSRSDQLKRHQRRHTGVKPFQCKTCQRKFSRSDHLKTHTRTHTGKTSEKP FSCRWPSCQKKFARSDELVRHHNMHQRNMTKLQLAL
Research Area	Cancer
Source	Yeast
Target Names	WT1
Protein Names	Recommended name: Wilms tumor protein Alternative name(s): WT33
Expression Region	1-449aa
Notes	Repeated freezing and thawing is not recommended. Store working aliquots at 4°C for up to one week.
Tag Info	N-terminal 6xHis-tagged
Mol. Weight	51.2kDa
Protein Length	Full Length

Image



(Tris-Glycine gel) Discontinuous SDS-PAGE (reduced) with 5% enrichment gel and 15% separation gel.

Description

The synthesis of this Recombinant Human WT1 protein depends on the utilization of recombinant DNA technology to a large degree. DNA sequences that encoded the WT1 protein could be inserted into a vector and introduced into an expression host, Yeast, where it could be easily expressed in and purified from. The expression of this WT1 protein was at 1-449aa. N-terminal 6xHis tag was fused with this protein. The purity is 90%+ determined by SDS-PAGE.

WT1 is gene encoding a protein named wilms tumor protein (WT1) or WT33 in human. The protein encoded by this gene regulates the expression of multiple genes through binding of the Cys2-His2 zinc-finger domain to promoter sites. It is involved in multiple biological processes, including adrenal cortex formation, adrenal gland development, epithelial cell differentiation, positive regulation of apoptotic process and DNA methylation, negative regulation of cell growth and cell population proliferation.

Reconstitution

We recommend that this vial be briefly centrifuged prior to opening to bring the contents to the bottom. Please reconstitute protein in deionized sterile water to a concentration of 0.1-1.0 mg/mL.We recommend to add 5-50% of glycerol (final concentration) and aliquot for long-term storage at -20°C/-80°C. Our default final concentration of glycerol is 50%. Customers could use it as reference.

Shelf Life

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