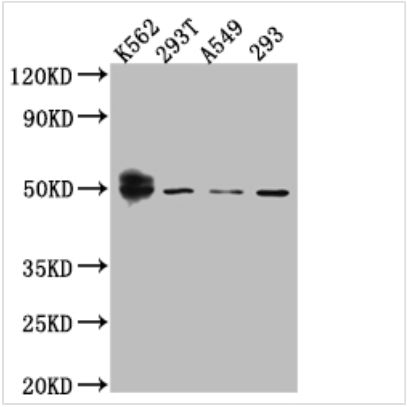
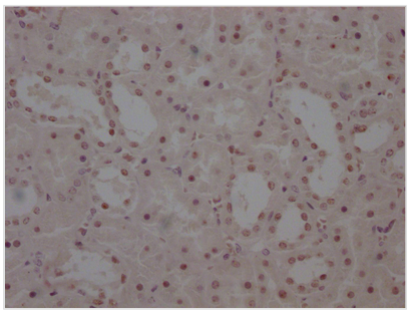
WT1 Antibody

Product Code	CSB-RA950156A0HU
Storage	Upon receipt, store at -20°C or -80°C. Avoid repeated freeze.
Uniprot No.	P19544
Immunogen	A synthesized peptide derived from human Wilms Tumor Protein
Species Reactivity	Human
Tested Applications	ELISA, WB, IHC; Recommended dilution: WB:1:500-1:5000, IHC:1:50-1:200
Relevance	Transcription factor that plays an important role in cellular development and cell survival (PubMed:7862533). Recognizes and binds to the DNA sequence 5'-GCG(T/G)GGGCG-3' (PubMed:7862533, PubMed:17716689, PubMed:25258363). Regulates the expression of numerous target genes, including EPO. Plays an essential role for development of the urogenital system. 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 (PubMed:15520190). Isoforms containing the KTS motif may bind mRNA and play a role in mRNA metabolism or splicing (PubMed:16934801). Isoform 1 has lower affinity for DNA, and can bind RNA (PubMed:19123921).
Form	Liquid
Conjugate	Non-conjugated
Storage Buffer	Rabbit IgG in phosphate buffered saline, pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol.
Purification Method	Affinity-chromatography
Isotype	Rabbit IgG
Clonality	Monoclonal
Product Type	Recombinant Antibody
Immunogen Species	Homo sapiens (Human)
Research Area	Epigenetics and Nuclear Signaling; Cancer; Developmental biology; Tags & Cell Markers
Gene Names	WT1
Accession NO.	5F2
Image	



Western Blot
Positive WB detected in: K562 whole cell lysate, 293T whole cell lysate, A549 whole cell lysate, HEK293 whole cell lysate
All lanes: Wilms Tumor Protein antibody at 1:1000
Secondary
Goat polyclonal to rabbit IgG at 1/50000 dilution
Predicted band size: 50, 48, 48, 49, 35, 57, 56, 34 kDa
Observed band size: 50 kDa



IHC image of CSB-RA950156A0HU diluted at 1:100 and staining in paraffin-embedded human kidney tissue performed on a Leica BondTM system. After dewaxing and hydration, antigen retrieval was mediated by high pressure in a citrate buffer (pH 6.0). Section was blocked with 10% normal goat serum 30min at RT. Then primary antibody (1% BSA) was incubated at 4°C overnight. The primary is detected by a Goat anti-rabbit IgG polymer labeled by HRP and visualized using 0.05% DAB.

Description

WT1 is critically involved in various developmental processes in vertebrates, including cell differentiation, control of the epithelial/mesenchymal phenotype, proliferation, and apoptosis. During embryogenesis, WT1 participates in the formation of organs such as the heart, kidney, spleen, and retina by regulating multiple target genes and signaling pathways. During embryonic development, WT1 affects the transcriptional expression of genes by regulating the promoter activity of various growth factors and their receptors. WT1 is involved in adult tissue homeostasis, kidney function, and cancer. WT1 plays a dual role in the tumor development either serving as a tumor suppressor or an oncogene depending on different types of cancer.

The production of this recombinant WT1 antibody was carried out in vitro. It began with immunization of animals so that the B cells could be obtained. The next step was selection of B cells. The positive cells would be screened out for the next step, single B cell antibody sequencing and cloning. Once the WT1 antibody sequence was obtained, it would be inserted into a plasmid, which could be transfected into mammalian cells for the expression of WT1 antibody.