



Wilms Tumor Protein Rabbit mAb

Catalog No	YP-rAb-17876
Isotype	IgG
Reactivity	Human,Mouse,Rat
Applications	WB,IHC,IF,ELISA
Gene Name	WT1
Protein Name	Wilms tumor protein (WT33)
Purification Process	Protein A
Specificity	Endogenous
Formulation	PBS, 50% glycerol, 0.05% Proclin 300, 0.05%BSA
Source	Monoclonal, Rabbit,IgG
Dilution	IHC 1:1000-1:5000; WB 1:1000-1:5000; IF 1:200-1:1000; ELISA 1:5000-1:20000; Note: For IHC, we suggest antigen retrieval with TE buffer pH 9.0
Concentration	0.5 mg/ml
Purity	≥90%
Storage Stability	-15° C to -25° C/1 year(Do not lower than -25° C)
Synonyms	
Observed Band	55kD
Calculated Molecular Weight	49kD
Cell Pathway	Nucleus
Tissue Specificity	Expressed in the kidney and a subset of hematopoietic cells.
Function	Disease:A chromosomal aberration involving WT1 may be a cause of desmoplastic small round cell tumor (DSRCT). Translocation t(11;22)(p13;q12) with EWSR1.,Disease:Defects in WT1 are a cause of hypospadias. Hypospadias is a common malformation in which the urethra opens on the ventral side of the penis. It is considered a complex disorder with both genetic and environmental factors involved in the pathogenesis. Hypospadias can occur alone on an apparently multifactorial basis or as part of syndromes.,Disease:Defects in WT1 are a cause of Meacham syndrome [MIM:608978]. Meacham syndrome is a rare sporadically occurring multiple malformation syndrome characterized by male pseudohermaphroditism with abnormal internal female genitalia comprising a uterus and double or septate vagina, complex congenital heart defect and diaphragmatic abnormalities.,Disease:Defects in WT1 are a cause of Wilms tumor--aniridia--genitourinary anomalies--mental retardation syndrome (WAGR





syndrome) [MIM:194072].,Disease:Defects in WT1 are the cause of Denys-Drash syndrome (DDS) [MIM:194080]. DDS is a typical nephropathy characterized by diffuse mesangial sclerosis, genital abnormalities, and/or Wilms tumor. There is phenotypic overlap with WAGR syndrome and Frasier syndrome. Inheritance is autosomal dominant, but most cases are sporadic.,Disease:Defects in WT1 are the cause of Frasier syndrome (FS) [MIM:136680]. FS is characterized by a slowly progressing nephropathy leading to renal failure in adolescence or early adulthood, male pseudohermaphroditism, and no Wilms tumor. As for histological findings of the kidneys, focal glomerular sclerosis is often observed. There is phenotypic overlap with Denys-Drash syndrome. Inheritance is autosomal dominant.,Disease:Defects in WT1 are the cause of isolated diffuse mesangial sclerosis (IDMS) [MIM:256370]. IDMS is an early-onset nephrotic syndrome occurring in the absence of other abnormalities and resulting in renal failure. Inheritance is autosomal recessive.,Disease:Defects in WT1 are the cause of Wilms tumor 1 (WT1) [MIM:194070]. WT is an embryonal malignancy of the kidney that affects approximately 1 in 10'000 infants and young children. It occurs both in sporadic and hereditary forms.,Function:Potential role in transcriptional regulation. Recognizes and binds to the DNA sequence 5'-CGCCCCGC-3'.,similarity:Belongs to the EGR C2H2-type zinc-finger protein family.,similarity:Contains 4 C2H2-type zinc fingers.,subunit:Interacts with WTIP (By similarity). Interacts with ZNF224 via the zinc-finger region. Interacts with WTAP and SRY.,tissue specificity:Expressed in the kidney and a subset of hematopoietic cells.,

Background

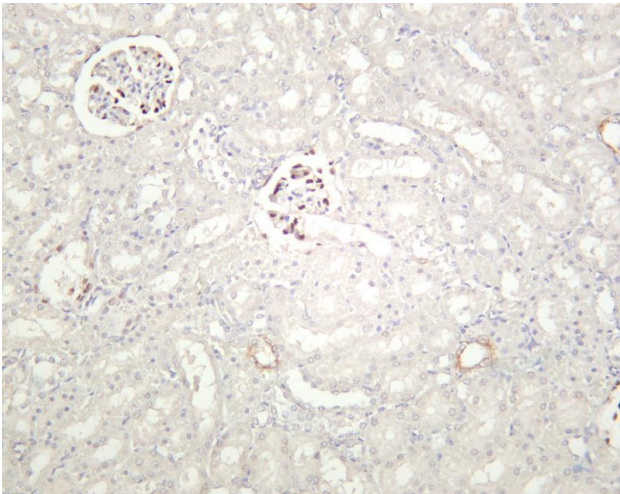
This gene encodes a transcription factor that contains four zinc-finger motifs at the C-terminus and a proline/glutamine-rich DNA-binding domain at the N-terminus. It has an essential role in the normal development of the urogenital system, and it is mutated in a small subset of patients with Wilms tumor. 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],

matters needing attention

Avoid repeated freezing and thawing!

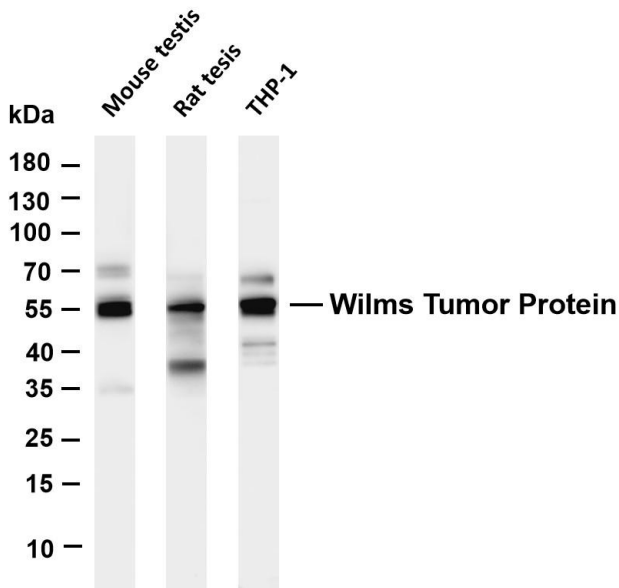
Usage suggestions

This product can be used in immunological reaction related experiments. For more information, please consult technical personnel.

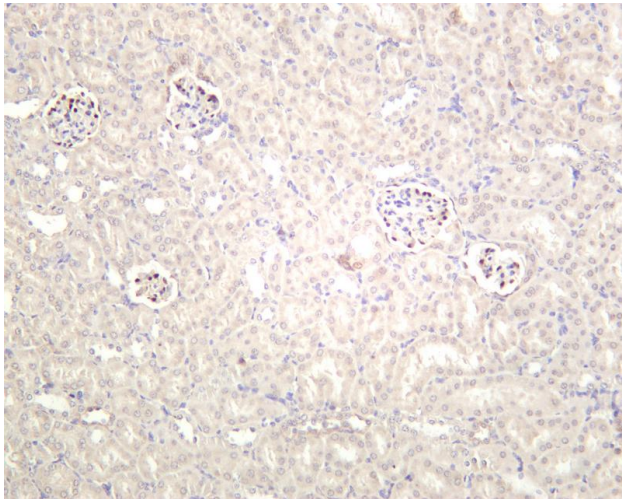


Rat kidney was stained with anti-Wilms Tumor Protein rabbit antibody

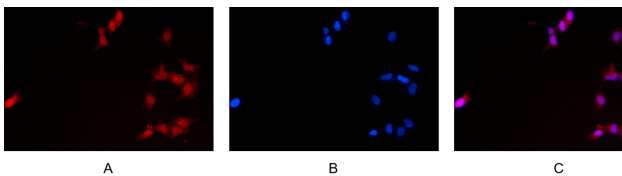




Various whole cell lysates were separated by 4-20% SDS-PAGE, and the membrane was blotted with anti-Wilms Tumor Protein antibody. The HRP-conjugated Goat anti-Rabbit IgG(H + L) antibody was used to detect the antibody. Lane 1: Mouse testis Lane 2: Rat testis Lane 3: THP-1 Predicted band size: 55kDa Observed band size: 55kDa



Mouse kidney was stained with anti-Wilms Tumor Protein rabbit antibody



Immunofluorescence analysis of HEK293. Picture A: Wilms Tumor Protein antibody (red). Picture B: DAPI (blue). Picture C: Merge of A+B

