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Product datasheet

Anti-Wilms Tumor Protein antibody ab180840

11 References 3 Images

Overview

Product name	Anti-Wilms Tumor Protein antibody
Description	Rabbit polyclonal to Wilms Tumor Protein
Host species	Rabbit
Tested applications	**Suitable for:** WB, IHC-P, ICC/IF
Species reactivity	**Reacts with:** Mouse, Human **Predicted to work with:** Pig
Immunogen	Recombinant full length protein corresponding to Human Wilms Tumor Protein aa 1-302. Sequence: MEKGYSTVTFDGTPSYGHTPSHHAAQFPNHSFKHEDPMG QQGSLGEQQYS VPPPVYGCHTPTDSCTGSQALLLRTPYSSDNLYQMTSQLE CMTWNQMNLG ATLKGVAAGSSSSVKWTEGQSNHSTGYESDNHTTPILCG AQYRIHTHGVF RGIQDVRRVPGVAPTLVRSASETSEKRPFMCAYPGCNKR YFKLSHLQMHS RKHTGEKPYQCDFKDCERRFSRSDQLKRHQRRHTGVKP FQCKTCQRKFSR SDHLKTHTRTHTGEKPFSCRWPSCQKKFARSDELVRHHN MHQRNMTKLQL AL Database link: **P19544-6** **Run BLAST with** **Run BLAST with**
Positive control	WB: Human kidney and rat kidney tissue lysates. A549 and MCF7 cell lysates IHC-P: Human lung, human kidney and rat testis tissues.
General notes	The Life Science industry has been in the grips of a reproducibility crisis for a number of years. Abcam is leading the way in addressing this with our range of recombinant monoclonal antibodies and knockout edited cell lines for gold-standard validation. Please check that this product meets your needs before purchasing. If you have any questions, special requirements or concerns, please send us an inquiry and/or contact our Support team ahead of purchase. Recommended alternatives for this product can be found below, along with publications, customer reviews and Q&As

Properties

Form	Liquid
Storage instructions	Shipped at 4°C. Store at +4°C short term (1-2 weeks). Upon delivery aliquot. Store at -20°C long term. Avoid freeze / thaw cycle.
Storage buffer	pH: 7.30 Preservative: 0.02% Sodium azide Constituents: 49% PBS, 50% Glycerol
Purity	Immunogen affinity purified
Clonality	Polyclonal
Isotype	IgG

Applications

The Abpromise guarantee Our **Abpromise guarantee** covers the use of ab180840 in the following tested applications.

The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Application	Abreviews	Notes
WB		1/500 - 1/2000.
IHC-P		1/50 - 1/200. **ab171870** - Rabbit polyclonal IgG, is suitable for use as an isotype control with this antibody.
ICC/IF		Use at an assay dependent concentration.

Target

Function	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.
Tissue specificity	Expressed in the kidney and a subset of hematopoietic cells.
Involvement in 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. 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. 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.
Defects in WT1 are the cause of nephrotic syndrome type 4 (NPHS4) [MIM:256370]. A renal disease characterized clinically by proteinuria, hypoalbuminemia, hyperlipidemia and edema. Kidney biopsies show non-specific histologic changes such as focal segmental glomerulosclerosis and diffuse mesangial proliferation. Some affected individuals have an inherited steroid-resistant form and progress to end-stage renal failure. Most patients with NPHS4 show diffuse mesangial sclerosis on renal biopsy, which is a pathologic entity characterized by mesangial matrix expansion with no mesangial hypercellularity, hypertrophy of the podocytes, vacuolized podocytes, thickened basement membranes, and diminished patency of the capillary lumen.
Defects in WT1 are a cause of Meacham syndrome (MEACHS) [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.
Note=A chromosomal aberration involving WT1 may be a cause of desmoplastic small round cell tumor (DSRCT). Translocation t(11;22)(p13;q12) with EWSR1.

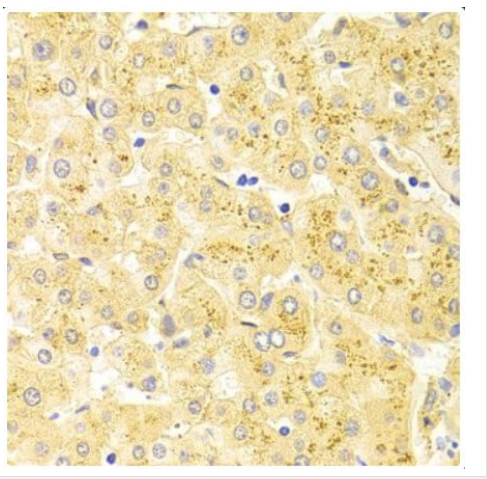
Sequence similarities

Belongs to the EGR C2H2-type zinc-finger protein family.
Contains 4 C2H2-type zinc fingers.

Cellular localization

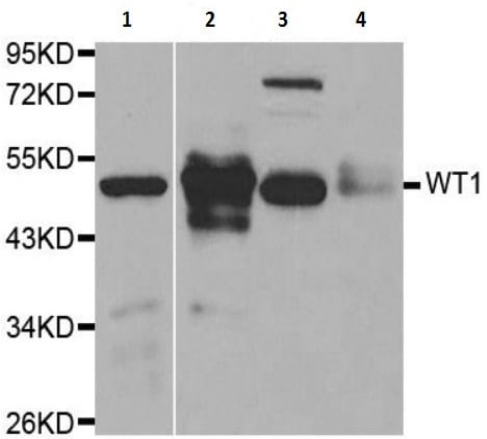
Nucleus. Cytoplasm. Shuttles between nucleus and cytoplasm; Nucleus > nucleoplasm and Nucleus speckle.

Images



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Wilms Tumor Protein antibody (ab180840)

Immunohistochemical analysis of paraffin-embedded human liver injury using WT1 antibody (ab180840) at dilution of 1/100.



Western blot - Anti-Wilms Tumor Protein antibody (ab180840)

All lanes : Anti-Wilms Tumor Protein antibody (ab180840) at 1/500 dilution

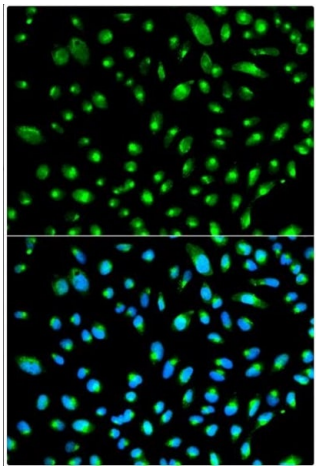
Lane 1 : A549 cell lysate
Lane 2 : MCF7 cell lysate
Lane 3 : Mouse heart tissue lysate
Lane 4 : Mouse testis tissue lysate

Lysates/proteins at 25 µg per lane.

Secondary
All lanes : HRP Goat Anti-Rabbit IgG (H+L) at 1/10000 dilution

Observed band size: 49 kDa

Blocking buffer: 3% nonfat dry milk in TBST.



Immunocytochemistry/ Immunofluorescence - Anti-Wilms Tumor Protein antibody (ab180840)

Immunocytochemistry/ Immunofluorescence analysis of HeLa cells using WT1 antibody (ab180840). Blue: DAPI for nuclear staining.

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