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Product datasheet

Anti-Wilms Tumor Protein antibody [SP320] - N-terminal ab224801

Recombinant RabMAb

6 Images

Overview

Product name	Anti-Wilms Tumor Protein antibody [SP320] - N-terminal
Description	Rabbit monoclonal [SP320] to Wilms Tumor Protein - N-terminal
Host species	Rabbit
Tested applications	**Suitable for:** Flow Cyt (Intra), IHC-P
Species reactivity	**Reacts with:** Mouse, Rat, Human
Immunogen	Synthetic peptide corresponding to Human Wilms Tumor Protein (N terminal). Database link: **P19544**
Positive control	IHC-P: Human ovarian carcinoma, Rat testis, and Mouse testis tissue; Flow Cyt (Intra): K562 cells.
General notes	**This product is FOR RESEARCH USE ONLY. For commercial use, please contact partnerships@abcam.com.** 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: 7.60 Preservative: 0.1% Sodium azide Constituents: PBS, 1% BSA
Purity	Protein A/G purified
Purification notes	Purified from TCS by protein A/G.

Clonality	Monoclonal
Clone number	SP320
Isotype	IgG

Applications

The Abpromise guarantee Our **Abpromise guarantee** covers the use of ab224801 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
Flow Cyt (Intra)		1/100.
IHC-P		1/100. Perform heat mediated antigen retrieval with EDTA buffer pH 8 before commencing with IHC staining protocol.

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.

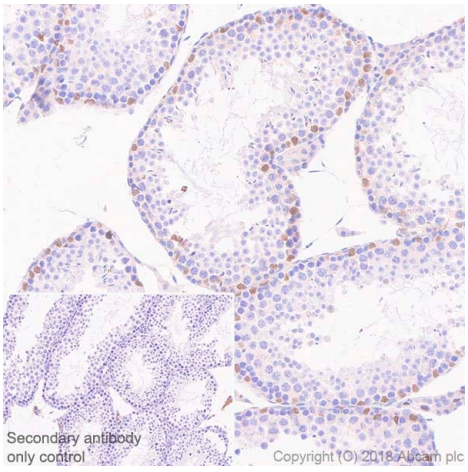
Sequence similarities

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

Cellular localization

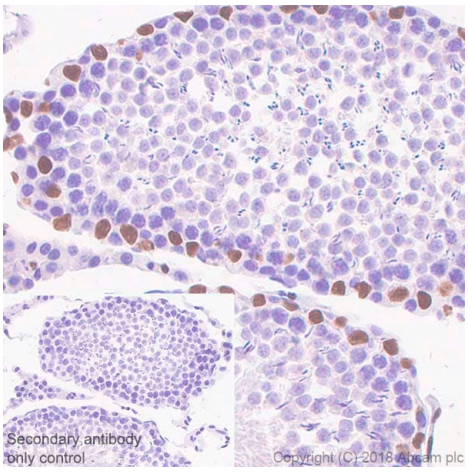
Nucleus. Cytoplasm. Shuttles between nucleus and cytoplasm; Nucleus > nucleoplasm and Nucleus speckle.

Images



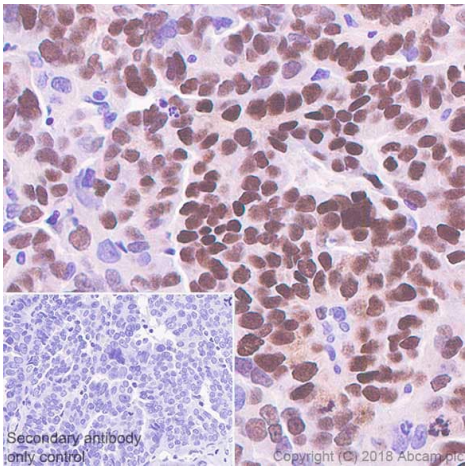
Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Wilms Tumor Protein antibody [SP320] - N-terminal (ab224801)

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) analysis of Mouse testis tissue sections labeling Wilms Tumor Protein with ab224801 at 1/400 dilution (0.90 µg/ml). Heat mediated antigen retrieval was performed Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0, epitope retrieval solution 2) for 10 mins. Goat Anti-Rabbit & Mouse IgG (HRP) was used as the secondary antibody. Negative control: PBS instead of the primary antibody. Hematoxylin was used as a counterstain.



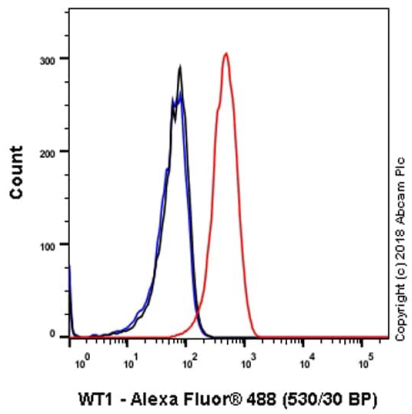
Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Wilms Tumor Protein antibody [SP320] - N-terminal (ab224801)

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) analysis of Rat testis tissue sections labeling Wilms Tumor Protein with ab224801 at 1/100 dilution (3.58 µg/ml). Heat mediated antigen retrieval was performed Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0, epitope retrieval solution 2) for 10 mins. Goat Anti-Rabbit & Mouse IgG (HRP) was used as the secondary antibody. Negative control: PBS instead of the primary antibody. Hematoxylin was used as a counterstain.



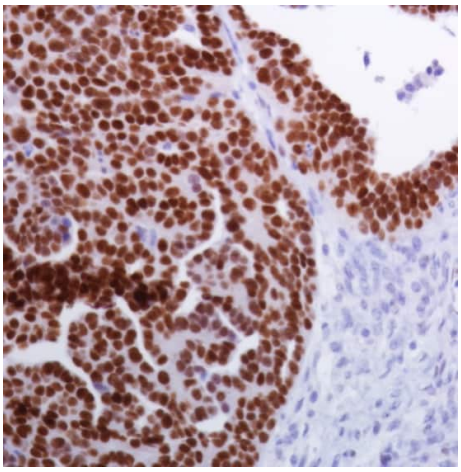
Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Wilms Tumor Protein antibody [SP320] - N-terminal (ab224801)

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) analysis of Human ovarian carcinoma tissue sections labeling Wilms Tumor Protein with ab224801 at 1/100 dilution (3.58 µg/ml). Heat mediated antigen retrieval was performed Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0, epitope retrieval solution 2) for 10 mins. Goat Anti-Rabbit & Mouse IgG (HRP) was used as the secondary antibody. Negative control: PBS instead of the primary antibody. Hematoxylin was used as a counterstain.



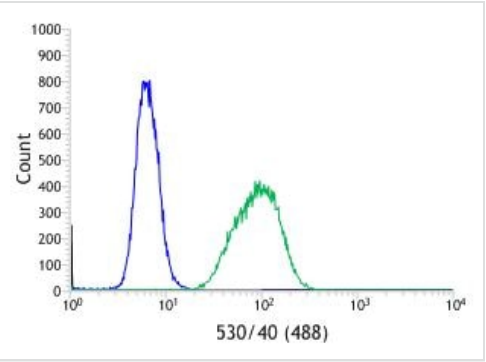
Flow Cytometry (Intracellular) - Anti-Wilms Tumor Protein antibody [SP320] - N-terminal (ab224801)

Flow Cytometry analysis of K-562 (human chronic myelogenous leukemia lymphoblast) cells labeling Wilms Tumor Protein with purified ab224801 at 1:20 dilution (11.93 µg/ml) - Red. Cells were fixed with 4% paraformaldehyde . A Goat anti rabbit IgG (Alexa Fluor® 488, **ab150081**) secondary antibody was used at 1:2000 dilution. Isotype control - Rabbit monoclonal IgG (**ab172730**) - Black. Unlabeled control - Blue.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Wilms Tumor Protein antibody [SP320] - N-terminal (ab224801)

Formalin-fixed, paraffin-embedded human ovarian adenocarcinoma tissue stained for Wilms Tumor Protein using ab224801 at 1/100 dilution in immunohistochemical analysis.



Flow Cytometry (Intracellular) - Anti-Wilms Tumor Protein antibody [SP320] - N-terminal (ab224801)

Flow cytometric analysis of K652 (human chronic myelogenous leukemia cell line from bone marrow) cells labeling Wilms Tumor Protein with ab224801 at 1/100 dilution (green) compared with a rabbit IgG negative control (blue).

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