abcam

Product datasheet

Anti-Wilms Tumor Protein antibody [EPR23963-116] ab267377



ייבע RabMAb

2 References 画像数 11

製品の概要

製品名 Anti-Wilms Tumor Protein antibody [EPR23963-116]

製品の詳細 Rabbit monoclonal [EPR23963-116] to Wilms Tumor Protein

由来種 Rabbit

アプリケーション 適用あり: WB, IHC-P, ICC/IF, mIHC

適用なし: Flow Cyt,IHC-Fr or IP

種交差性 交差種: Mouse, Rat, Human

免疫原 Recombinant fragment. This information is proprietary to Abcam and/or its suppliers.

ポジティブ・コントロール WB: HAP1, K-562 and NIH:OVCAR-3 whole cell lysates; Mouse and rat testis tissue lysate. IHC-

P: Human kidney, testis and ovarian carcinoma tissue; Mouse testis tissue; Rat testis tissue.

ICC/IF: OVCAR-3 cells. mIHC: Human testis.

特記事項 This product is a recombinant monoclonal antibody, which offers several advantages including:

- High batch-to-batch consistency and reproducibility

- Improved sensitivity and specificity

- Long-term security of supply

- Animal-free production

For more information see here.

Our RabMAb® technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to **RabMAb**® **patents**.

製品の特性

製品の状態

保存方法 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.

バッファー Preservative: 0.01% Sodium azide

Constituents: 59.94% PBS, 40% Glycerol (glycerin, glycerine), 0.05% BSA

精製度 Protein A purified

ポリモノ モノクローナル

クローン名 EPR23963-116

アプリケーション

The Abpromise guarantee <u>Abpromise保証は、</u>次のテスト済みアプリケーションにおけるab267377の使用に適用されます アプリケーションノートには、推奨の開始希釈率がありますが、適切な希釈率につきましてはご検討ください。

| アプリケーション | Abreviews | 特記事項 |
|----------|-----------|---|
| WB | | 1/1000. Detects a band of approximately 52, 54 kDa (predicted molecular weight: 49 kDa). |
| IHC-P | | 1/500. Perform heat mediated antigen retrieval with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol. |
| ICC/IF | | 1/50. |
| mIHC | | Use at an assay dependent concentration. |

追加情報

Is unsuitable for Flow Cyt, IHC-Fr or IP.

ターゲット情報

機能

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'-CGCCCCGC-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.

組織特異性

関連疾患

Expressed in the kidney and a subset of hematopoietic cells.

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.

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

Contains 4 C2H2-type zinc fingers.

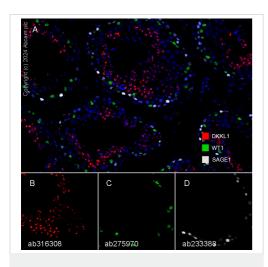
Nucleus. Cytoplasm. Shuttles between nucleus and cytoplasm; Nucleus > nucleoplasm and

Nucleus speckle.

画像

配列類似性

細胞内局在



Multiplex immunohistochemistry - Anti-Wilms Tumor Protein antibody [EPR23963-116] (ab267377)

Multiplex immunohistochemical analysis of formalin/PFA-fixed paraffin-embedded Human testis tissue sections labeling DKKL1 with <u>ab316308</u> at a 1/2000 dilutions (B), WT1 with <u>ab275970</u> at a 1/1200 dilutions (C), and SAGE1 with <u>ab233388</u> at a 1/250 dilutions (D). Opal Polymer HRP Ms + Rb was used as a secondary antibody.

Panel A: merged staining of anti-DKKL1 (red; Opal[™] 570), anti-WT1 (green; Opal[™] 520) and anti-SAGE1 (gray; Opal[™] 690) on human testis.

Panel B: anti-DKKL1 staining mature sperm cells in human testis.

Panel C: anti-WT1 staining sertoli cells in human testis.

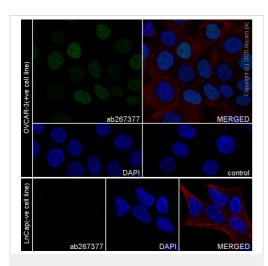
Panel D: anti-SAGE1 staining spermatogonia in human testis.

Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0, epitope retrieval solution2) for 20 mins. The section was incubated in three rounds of staining: in the order of <u>ab316308</u>, <u>ab275970</u>, and <u>ab233388</u> for 30 mins at room temperature. Each round was followed by a separate fluorescent tyramide signal amplification system.

DAPI was used as a nuclear counterstain.

The immunostaining was performed on a Leica Biosystems BOND[®] RX instrument with an Opal[™] 4-color kit. Image acquisition was performed with Leica SP8 confocal microscope.

This data was developed using <u>ab275970</u>, the same antibody clone in a different buffer formulation.



Immunocytochemistry/ Immunofluorescence - Anti-Wilms Tumor Protein antibody [EPR23963-116] (ab267377)

Immunofluorescent analysis of 4% paraformaldehyde-fixed, 0.1% TritonX-100 permeabilized OVCAR-3 (human ovary adenocarcinoma epithelial cell) cells labelling Wilms tumor protein with ab267377 at 1/50 dilution, followed by abbit lgG H&L (Alexa Fluor[®] 488) antibody at 1/1000 dilution (Green). Confocal image showing nuclear staining in OVCAR-3 cells. **Negative control:** LnCap (PMID:11299720). ab195889 Anti-alpha Tubulin mouse monoclonal antibody - Microtubule Marker (Alexa Fluor[®] 594) was used to counterstain tubulin at 1/200 dilution (Red). The Nuclear counterstain was DAPI (Blue).

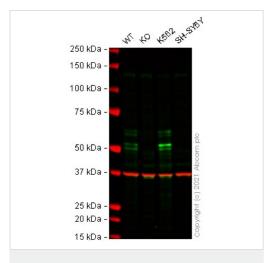
Secondary antibody only control: Secondary antibody is <u>ab150077</u> Goat Anti-Rabbit lgG H&L (Alexa Fluor[®] 488) at 1/1000 dilution.



Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-Wilms Tumor Protein antibody [EPR23963-116] (ab267377)

Immunohistochemical analysis of paraffin-embedded human kidney tissue labeling Wilms tumor protein with ab267377 at 1/500 dilution followed by a ready to use LeicaDS9800 (Bond® Polymer Refine Detection). Nuclear staining on human renal glomeruli (PMID:27922671). The section was incubated with ab267377 for 30 mins at room temperature. The immunostaining was performed on a Leica Biosystems BOND®RX instrument. Counterstained with Hematoxylin.

Secondary antibody only control: Secondary antibody is a ready to use LeicaDS9800 (Bond[®] Polymer Refine Detection).



Western blot - Anti-Wilms Tumor Protein antibody [EPR23963-116] (ab267377)

All lanes : Anti-Wilms Tumor Protein antibody [EPR23963-116] (ab267377) at 1/1000 dilution

Lane 1: Wild-type HAP1 cell lysate

Lane 2: Wt1 knockout HAP1 cell lysate

Lane 3: K-562 (Human chronic myelogenous leukemia

lymphoblast cell line) whole cell lysate

Lane 4: SH-SY5Y (Human neuroblastoma cell line from bone

marrow) whole cell lysate

Lysates/proteins at 20 µg per lane.

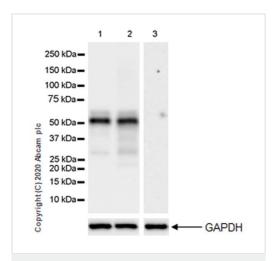
Performed under reducing conditions.

Predicted band size: 49 kDa

Observed band size: 50-60 kDa

Lanes 1 - 4: Merged signal (red and green). Green - ab267377 observed at 50-60 kDa. Red - loading control <u>ab8245</u> (Mouse anti-GAPDH antibody [6C5]) observed at 37 kDa.

ab267377 was shown to react with Wilms Tumor Protein in wild-type HAP1 cells in Western blot with loss of signal observed in Wt1 knockout sample. Wild-type HAP1 and Wt1 knockout cell lysates were subjected to SDS-PAGE. Membranes were blocked in 3 % milk in TBS-T (0.1 % Tween®) before incubation with ab267377 and ab8245 (Mouse anti-GAPDH antibody [6C5]) overnight at 4 °C at a 1 in 1000 dilution and a 1 in 20000 dilution respectively. Blots were incubated with Goat anti-Rabbit lgG H&L (IRDye® 800CW) preabsorbed (ab216773) and Goat anti-Mouse lgG H&L (IRDye® 680RD) preabsorbed (ab216773) secondary antibodies at 1 in 20000 dilution for 1 h at room temperature before imaging.



Western blot - Anti-Wilms Tumor Protein antibody [EPR23963-116] (ab267377)

All lanes : Anti-Wilms Tumor Protein antibody [EPR23963-116] (ab267377) at 1/1000 dilution

Lane 1: K-562 (human chronic myelogenous leukemia lymphoblast) whole cell lysate

Lane 2 : NIH:OVCAR-3 (human ovary adenocarcinoma epithelial cell) whole cell lysate

Lane 3 : LNCaP (human prostate carcinoma epithelial cell) whole cell lysate

Lysates/proteins at 20 µg per lane.

Secondary

All lanes : Goat Anti-Rabbit lgG, (H+L), Peroxidase conjugated (ab97051) at 1/50000 dilution

Predicted band size: 49 kDa

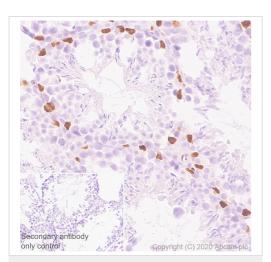
Observed band size: 52.54 kDa

Blocking and diluting buffer and concentration: 5% NFDM/TBST.

The molecular weight observed is consistent with what has been described in the literature (PMID: 10438524).

Negative control: LNCaP (PMID:11299720).

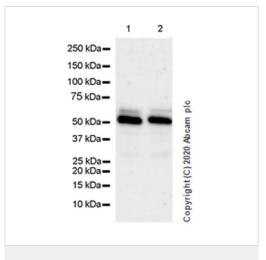
Exposure time: 26 seconds.



Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-Wilms Tumor Protein antibody [EPR23963-116] (ab267377)

Immunohistochemical analysis of paraffin-embedded mouse testis tissue labeling Wilms tumor protein with ab267377 at 1/500 dilution followed by a ready to use LeicaDS9800 (Bond® Polymer Refine Detection). Nuclear staining on Sertoli cells of mouse testis (PMID:17229929). The section was incubated with ab267377 for 30 mins at room temperature. The immunostaining was performed on a Leica Biosystems BOND® RX instrument. Counterstained with Hematoxylin.

Secondary antibody only control: Secondary antibody is a ready to use LeicaDS9800 (Bond[®] Polymer Refine Detection).



Western blot - Anti-Wilms Tumor Protein antibody [EPR23963-116] (ab267377) **All lanes :** Anti-Wilms Tumor Protein antibody [EPR23963-116] (ab267377) at 1/1000 dilution

Lane 1 : Mouse testis tissue lysate

Lane 2 : Rat testis tissue lysate

Lysates/proteins at 20 µg per lane.

Secondary

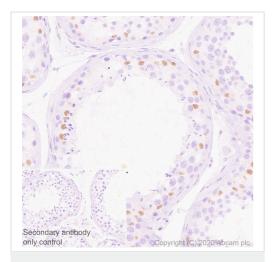
All lanes : Goat Anti-Rabbit lgG, (H+L), Peroxidase conjugated (ab97051) at 1/50000 dilution

Predicted band size: 49 kDa **Observed band size:** 52,54 kDa

Blocking and diluting buffer and concentration: 5% NFDM/TBST.

The molecular weight observed is consistent with what has been described in the literature (PMID: 10438524).

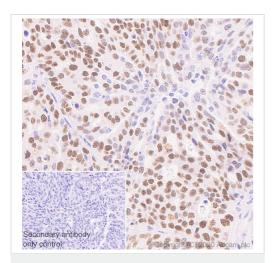
Exposure time: 3 minutes.



Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-Wilms Tumor Protein antibody [EPR23963-116] (ab267377)

Immunohistochemical analysis of paraffin-embedded human testis tissue labeling Wilms tumor protein with ab267377 at 1/500 dilution followed by a ready to use Goat Anti-Rabbit IgG H&L (HRP). Nuclear staining on Sertoli cells of human testis (PMID:17229929). The section was incubated with ab267377 for 30 mins at room temperature. The immunostaining was performed on a Leica Biosystems BOND® RX instrument. Counterstained with Hematoxylin.

Secondary antibody only control: Secondary antibody is a ready to use Goat Anti-Rabbit lgG H&L (HRP).

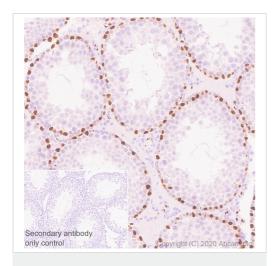


Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-Wilms Tumor Protein antibody [EPR23963-116] (ab267377)

Immunohistochemical analysis of paraffin-embedded human ovarian carcinoma tissue labeling Wilms tumor protein with ab267377 at 1/500 dilution followed by a ready to use Goat Anti-Rabbit IgG H&L (HRP). Nuclear staining on human ovarian carcinoma (PMID:16547468). The section was incubated with ab267377 for 30 mins at room temperature. The immunostaining was performed on a Leica Biosystems BOND® RX instrument. Counterstained with Hematoxylin.

Secondary antibody only control: Secondary antibody is a ready to use Goat Anti-Rabbit lgG H&L (HRP).

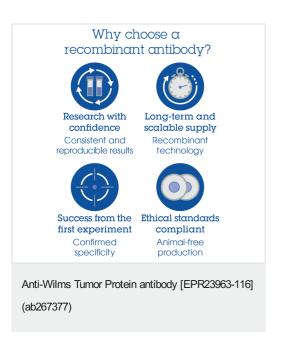
Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0, epitope retrieval solution2) for 20 mins.



Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-Wilms Tumor Protein antibody [EPR23963-116] (ab267377)

Immunohistochemical analysis of paraffin-embedded rat testis tissue labeling Wilms tumor protein with ab267377 at 1/500 dilution followed by a ready to use LeicaDS9800 (Bond[®] Polymer Refine Detection). Nuclear staining on Sertoli cells of rat testis (PMID:17229929). The section was incubated with ab267377 for 30 mins at room temperature. The immunostaining was performed on a Leica Biosystems BOND[®] RX instrument Counterstained with Hematoxylin.

Secondary antibody only control: Secondary antibody is a ready to use LeicaDS9800 (Bond[®] Polymer Refine Detection) was used.



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