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WT1 Antibody (Center E361)

Affinity Purified Rabbit Polyclonal Antibody (Pab)

Catalog # AP11964c

Specification

WT1 Antibody (Center E361) - Product Information

Application	**IF, IHC-P, FC, WB,E**
Primary Accession	P19544
Other Accession	P49952, O62651, P22561, P79958, B7ZSG3, NP_000369
Reactivity	**Human, Mouse**
Predicted	**Xenopus, Pig, Rat**
Host	**Rabbit**
Clonality	**Polyclonal**
Isotype	**Rabbit IgG**
Antigen Region	**346-375**

WT1 Antibody (Center E361) - Additional Information

Gene ID 7490

Other Names
Wilms tumor protein, WT33, WT1

Target/Specificity
This WT1 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 346-375 amino acids from the Central region of human WT1.

Dilution
IF~~1:10~50
IHC-P~~1:50~100
FC~~1:25
WB~~1:1000
E~~Use at an assay dependent concentration.

Format
Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.

Storage
Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

Precautions
WT1 Antibody (Center E361) is for research use only and not for use in diagnostic or therapeutic procedures.

WT1 Antibody (Center E361) - Protein Information

Name WT1

Function 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:17716689, PubMed:25258363, PubMed:7862533). 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).

Cellular Location
Nucleus. Nucleus, nucleolus. Cytoplasm. Note=Isoforms lacking the KTS motif have a diffuse nuclear location (PubMed:15520190). Shuttles between nucleus and cytoplasm. {ECO:0000250, ECO:0000269|PubMed:15520190} [Isoform 4]: Nucleus, nucleoplasm

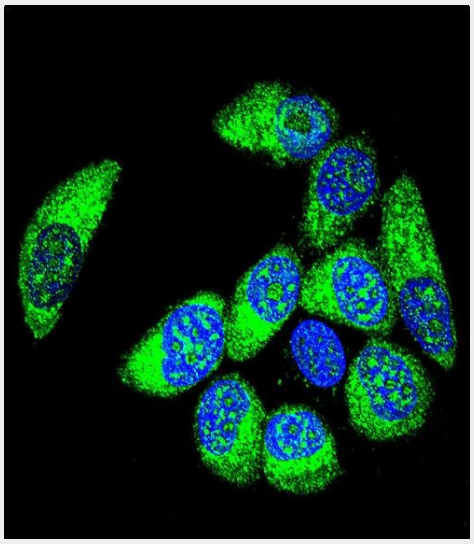
Tissue Location
Expressed in the kidney and a subset of hematopoietic cells

WT1 Antibody (Center E361) - Protocols

Provided below are standard protocols that you may find useful for product applications.

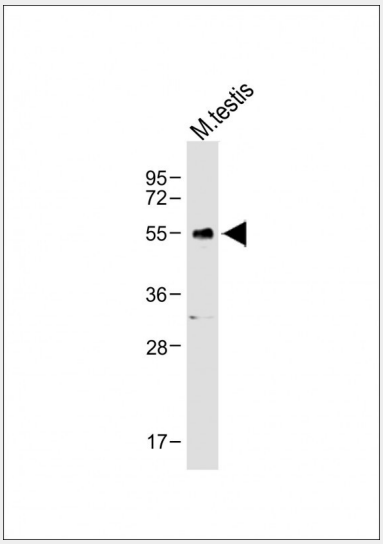
- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

WT1 Antibody (Center E361) - Images

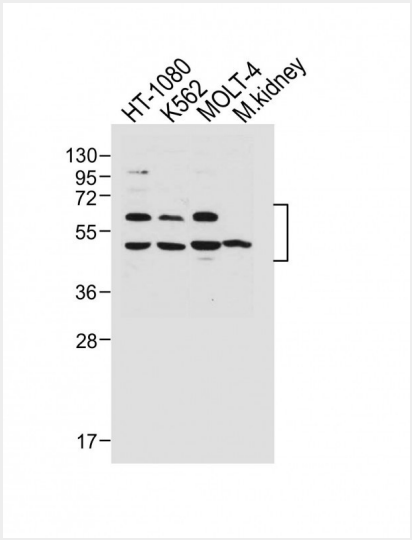


Confocal immunofluorescent analysis of WT1 Antibody (Center E361)(Cat. #AP11964c) with MCF-7 cell followed by Alexa Fluor® 488-conjugated goat anti-rabbit IgG (green). DAPI was used

to stain the cell nuclear (blue).



Anti-WT1 Antibody (Center E361) at 1:1000 dilution + Mouse testis lysate Lysates/proteins at 20 µg per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/10000 dilution. Predicted band size : 49 kDa Blocking/Dilution buffer: 5% NFDM/TBST.



All lanes : Anti-WT1 Antibody (Center E361) at 1:1000 dilution Lane 1: HT-1080 whole cell lysate Lane 2: K562 whole cell lysate Lane 3: MOLT-4 whole cell lysate Lane 4: Mouse kidney lysate Lysates/proteins at 20 µg per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/10000 dilution. Predicted band size : 49 kDa Blocking/Dilution buffer: 5% NFDM/TBST.

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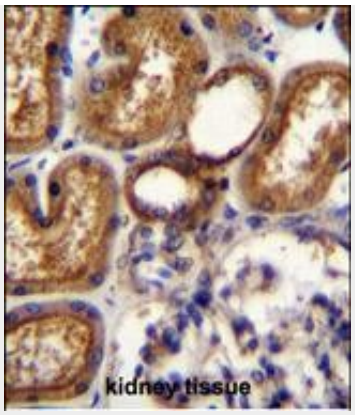
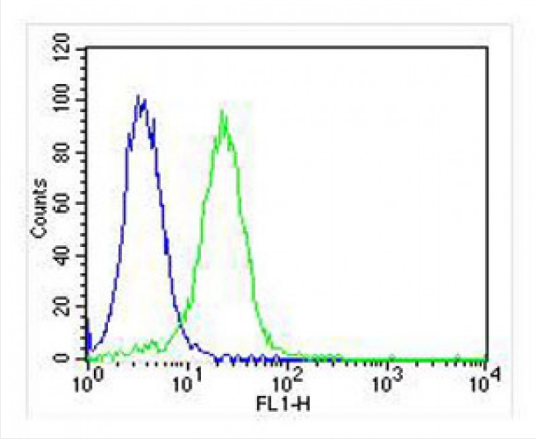


WT1 Antibody (Center E361) (Cat. #AP11964c)immunohistochemistry analysis in formalin fixed and paraffin embedded human kidney tissue followed by peroxidase conjugation of the secondary antibody and DAB staining.This data demonstrates the use of WT1 Antibody (Center E361) for immunohistochemistry. Clinical relevance has not been evaluated.



Overlay histogram showing Hela cells stained with AP11964c (green line). The cells were fixed with 2% paraformaldehyde (10 min) and then permeabilized with 90% methanol for 10 min. The cells were then icubated in 2% bovine serum albumin to block non-specific protein-protein interactions followed by the antibody (AP11964c, 1:25 dilution) for 60 min at 37ºC. The secondary antibody used was Goat-Anti-Rabbit IgG, DyLight® 488 Conjugated Highly Cross-Adsorbed(OH191631) at 1/400 dilution for 40 min at 37ºC. Isotype control antibody (blue line) was rabbit IgG1 (1µg/1x10^6 cells) used under the same conditions. Acquisition of >10, 000 events was performed.

WT1 Antibody (Center E361) - 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 Wilm's tumors. 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 site 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].

WT1 Antibody (Center E361) - References

Sitaram, R.T., et al. Br. J. Cancer 103(8):1255-1262(2010)
Dohi, S., et al. Anticancer Res. 30(8):3187-3192(2010)
Rocquain, J., et al. BMC Cancer 10, 401 (2010) :
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