

# WT1 antibody

Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP22434a

# **Product Information**

Application	WB, E
Primary Accession	<u>P19544</u>
Reactivity	Human
Host	Rabbit
Clonality	polyclonal
Isotype	Rabbit Ig
Clone Names	R03797
Calculated MW	49188

### **Additional Information**

Gene ID	7490
Other Names	Wilms tumor protein, WT33, WT1
Target/Specificity	This antibody is generated from a rabbit immunized with a KLH conjugated synthetic peptide between amino acids from human.
Dilution	WB~~1:2000 E~~Use at an assay dependent concentration.
Format	Purified polyclonal antibody supplied in PBS with 0.05% (V/V) Proclin 300. 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 is for research use only and not for use in diagnostic or therapeutic procedures.

#### **Protein Information**

NameWT1FunctionTranscription factor that plays an important role in cellular development<br/>and cell survival (PubMed:7862533). Recognizes and binds to the DNA<br/>sequence 5'-GCG(T/G)GGGCG-3' (PubMed:17716689, PubMed:25258363,<br/>PubMed:7862533). Regulates the expression of numerous target genes,<br/>including EPO. Plays an essential role for development of the urogenital<br/>system. It has a tumor suppressor as well as an oncogenic role in tumor<br/>formation. Function may be isoform-specific: isoforms lacking the KTS motif

	may act as transcription factors (PubMed: <u>15520190</u> ). Isoforms containing the KTS motif may bind mRNA and play a role in mRNA metabolism or splicing (PubMed: <u>16934801</u> ). Isoform 1 has lower affinity for DNA, and can bind RNA (PubMed: <u>19123921</u> ).
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

# Background

Transcription factor that plays an important role in cellular development and cell survival (PubMed:<u>7862533</u>). Recognizes and binds to the DNA sequence 5'-GCG(T/G)GGGCG-3' (PubMed:<u>7862533</u>, PubMed:<u>17716689</u>, PubMed:<u>25258363</u>). 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:<u>15520190</u>). Isoforms containing the KTS motif may bind mRNA and play a role in mRNA metabolism or splicing (PubMed:<u>16934801</u>). Isoform 1 has lower affinity for DNA, and can bind RNA (PubMed:<u>19123921</u>).

# References

Gessler M.,et al.Nature 343:774-778(1990). Haber D.A.,et al.Proc. Natl. Acad. Sci. U.S.A. 88:9618-9622(1991). Gessler M.,et al.Genomics 12:807-813(1992). Ota T.,et al.Nat. Genet. 36:40-45(2004). Taylor T.D.,et al.Nature 440:497-500(2006).

# Images



All lanes: Anti-WT1 antibody at 1:1000 dilution + K562 whole cell lysate Lysates/proteins at 20 µg per lane. Secondary: Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated (ASP1615) at 1/15000 dilution. Observed band size: 54 KDa Blocking/Dilution buffer: 5% NFDM/TBST.

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.