

WT1 / Wilms Tumor 1 Antibody (clone 1E9)

Mouse Monoclonal Antibody Catalog # ALS14231

Specification

WT1 / Wilms Tumor 1 Antibody (clone 1E9) - Product Information

Application Primary Accession Reactivity Host Clonality Calculated MW

IHC <u>P19544</u> Human Mouse Monoclonal 49kDa KDa

WT1 / Wilms Tumor 1 Antibody (clone 1E9) - Additional Information

Gene ID 7490

Other Names Wilms tumor protein, WT33, WT1

Target/Specificity Human WT1

Reconstitution & Storage For long term, store at -20°C. Avoid repeat freeze-thaw cycles.

Precautions WT1 / Wilms Tumor 1 Antibody (clone 1E9) is for research use only and not for use in diagnostic or therapeutic procedures.

WT1 / Wilms Tumor 1 Antibody (clone 1E9) - 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:<a



href="http://www.uniprot.org/citations/19123921" target="_blank">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:0000269, ECO:0000269|PubMed:15520190} [Isoform 4]: Nucleus, nucleoplasm

Tissue Location

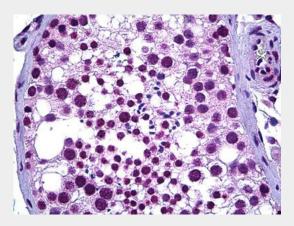
Expressed in the kidney and a subset of hematopoietic cells

WT1 / Wilms Tumor 1 Antibody (clone 1E9) - Protocols

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

- <u>Western Blot</u>
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- <u>Cell Culture</u>

WT1 / Wilms Tumor 1 Antibody (clone 1E9) - Images



Anti-WT1 antibody IHC of human testis.

WT1 / Wilms Tumor 1 Antibody (clone 1E9) - Background

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.

WT1 / Wilms Tumor 1 Antibody (clone 1E9) - 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).