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Anti-Wilm s Tumor 1 (WT1) Antibody
Recombinant Mouse Monoclonal Antibody
Catalog # AH13578

Specification

Anti-Wilm s Tumor 1 (WT1) Antibody - Product Information

Application	**IHC-P, IF, FC**
Primary Accession	P19544
Other Accession	591980
Reactivity	**Human**
Host	**Mouse**
Clonality	**Monoclonal**
Isotype	**Mouse / IgG1, kappa**
Calculated MW	**49188**

Anti-Wilm s Tumor 1 (WT1) Antibody - Additional Information

Gene ID 7490

Other Names
WT1; AWT1; FWT1; GUD; NPHS4; WAGR; Wilms tumor 1

Application Note
IHC-P~~N/A<br \>IF~~1:50~200<br \>FC~~1:10~50

Format
200ug/ml of recombinant MAb purified by Protein A/G. Prepared in 1mM PBS with 0.05% BSA & 0.05% azide. Also available WITHOUT BSA & azide at 1.0mg/ml.

Storage
Store at 2 to 8°C.Antibody is stable for 24 months.

Precautions
Anti-Wilm s Tumor 1 (WT1) Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

Anti-Wilm s Tumor 1 (WT1) Antibody - 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

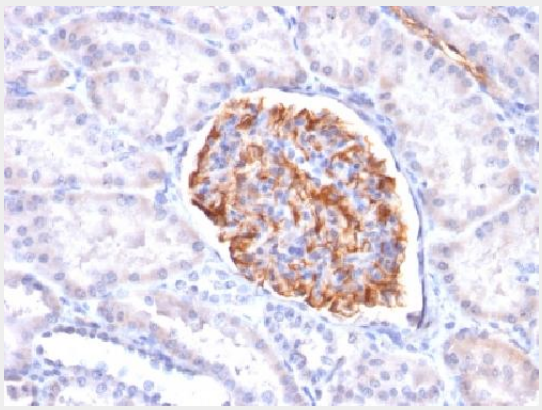
Tissue Location
Expressed in the kidney and a subset of hematopoietic cells

Anti-Wilm s Tumor 1 (WT1) Antibody - 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

Anti-Wilm s Tumor 1 (WT1) Antibody - Images



Formalin-fixed, paraffin-embedded Human Kidney stained with Wilm's Tumor Recombinant Mouse Monoclonal Antibody (rWT1/857).

Anti-Wilm s Tumor 1 (WT1) Antibody - Background

Recognizes a 47-55kDa-tumor suppressor protein, identified as Wilm's Tumor (WT1) protein. The antibody reacts with all isoforms of the full-length WT1 and also identifies WT1 lacking exon 2-encoded amino acids, frequently found in subsets of sporadic Wilm s tumors. WT1, a sporadic and familial pediatric kidney tumor, is genetically heterogeneous. Wilm s tumor is associated with mutations of WT1, a zinc-finger transcription factor that is essential for the development of the

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metanephric kidney and the urogenital system. The WT1 gene is normally expressed in fetal kidney and mesothelium, and its expression has been suggested as a marker for Wilm s tumor and mesothelioma. WT1 protein has been identified in proliferative mesothelial cells, malignant mesothelioma, ovarian carcinoma, gonadoblastoma, nephroblastoma, and desmoplastic small round cell tumor. Lung adenocarcinomas rarely stain positive with this antibody. WT1 protein expression in mesothelial cells has become a reliable marker for the diagnosis of mesotheliomas.