

## Wilm's Tumor 1 (WT1) (Wilm's Tumor & Mesothelial Marker) Antibody

Mouse Monoclonal Antibody [Clone WT1/7451]

Catalog No	Format	Size
7490-MSM11-P0	Purified Ab with BSA and Azide at 200ug/ml	20 ug
7490-MSM11-P1	Purified Ab with BSA and Azide at 200ug/ml	100 ug
7490-MSM11-P1ABX	Purified Ab WITHOUT BSA and Azide at 1.0mg/ml	100 ug

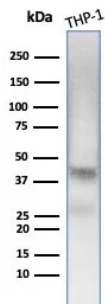
Applications	Tested Dillution	Note
Immunohistochemistry (IHC)	1-2ug/ml	30 min at RT. Staining of formalin-fixed tissues requires heating tissue sections in 10mM Tris with 1mM EDTA, pH 9.0, for 45 min at 95°C followed by cooling at RT for 20 minutes
Western Blot (WB)	2-4ug/ml	

### Product Details

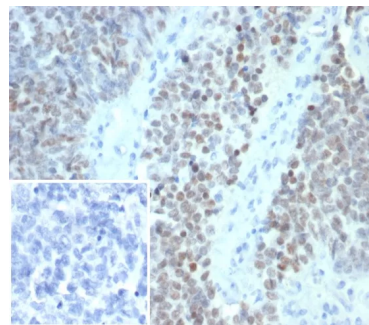
<b>Clone</b>	WT1/7451
<b>Gene Name</b>	WT1
<b>Immunogen</b>	Recombinant fragment (around aa150-350) of human WT1 protein (exact sequence is proprietary)
<b>Host</b>	Mouse
<b>Clonality</b>	Monoclonal
<b>Isotype / Light Chain</b>	IgG1 / Kappa
<b>Mol. Weight of Antigen</b>	49kDa
<b>Cellular Localization</b>	Nucleus and cytoplasm. Shuttles between nucleus and cytoplasm.
<b>Species Reactivity</b>	Human
<b>Positive Control</b>	Human Wilm s tumor mesothelioma or fetal kidney.

\*Optimal dilution for a specific application should be determined.

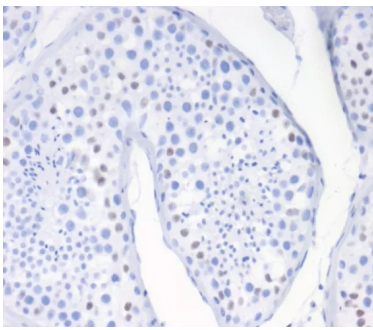
### Product Images for Wilm's Tumor 1 (WT1) (Wilm's Tumor & Mesothelial Marker) Antibody



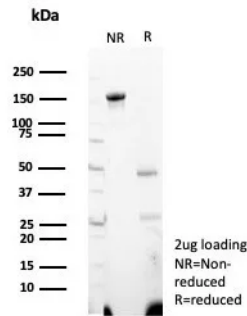
Western blot analysis of THP-1 cell lysate using Wilm's Tumor 1 (WT1) Mouse Monoclonal Antibody (WT1/7451).



Formalin-fixed, paraffin-embedded human ovarian carcinoma stained with Wilm's Tumor Mouse Monoclonal Antibody (WT1/7451). Inset: PBS instead of primary antibody; secondary only negative control.



Formalin-fixed, paraffin-embedded human testis stained with Wilm's Tumor Mouse Monoclonal Antibody (WT1/7451). HIER: Tris/EDTA, pH9.0, 45min. 2°C: HRP-polymer, 30min. DAB, 5min.



SDS-PAGE Analysis Purified WT1 Mouse Monoclonal Antibody (WT1/7451). Confirmation of Integrity and Purity of Antibody.

### Specificity & Comments

The WT1 gene located at chromosome 11p13 codes for a transcription factor, a DNA-binding nucleoprotein, that plays a role primarily in the development of genitourinary organs. There are at least eight isoforms ranging between 52 and 62kDa produced by a combination of alternative splicing and RNA editing. WT1 is synthesized and reside in the cytoplasm in an inactive form. When activated through phosphorylation it is translocated to the nucleus. WT1 influences cell proliferation by suppressing bcl-2 and regulating cadherin and p53. In normal epithelia, nuclear WT1 expression is largely restricted to ovary (surface epithelium and inclusion cysts) and fallopian tube, while WT1 is not found in endometrial or cervical epithelium. As regards nonepithelial cells, nuclear WT1 is found in mesothelium and some sub mesothelial stromal cells, stromal cells of the female genital tract, testicular non-germinal cells, and kidney (podocytes). In tumor tissues, WT1 is detected in tumor cells of Wilms Tumor (also known as nephroblastoma) and mesothelioma. Additionally, WT1 expression has been found in ovarian serous carcinomas and some breast carcinomas. WT1 is particularly used for distinguishing malignant mesothelioma and ovarian serous carcinoma from nonserous carcinomas. As for malignant mesothelioma, calretinin and WT1 are superior to cytokeratin 5/6, N-cadherin and thrombomodulin. WT1 is also applicable for the differential diagnostic of small cell childhood tumors.

### Limitations and Warranty

This antibody is available for research use only and is not approved for use in diagnosis. There are no warranties, expressed or implied, which extend beyond this description. Company is not liable for any personal injury or economic loss resulting from this product.

### Supplied As

200ug/ml of Ab purified by Protein A/G. Prepared in 10mM PBS with 0.05% BSA & 0.05% azide. Also available WITHOUT BSA & azide at 1.0mg/ml.

### Storage and Stability

Antibody with azide - store at 2 to 8°C. Antibody without azide - store at -20 to -80°C. Antibody is stable for 24 months. Non-hazardous. No MSDS required.

### Research Areas

Cardiac Stem Cells, Developmental Biology, Stem Cell Differentiation