

Product Datasheet

Wilms Tumor 1 Antibody / WT1 (orb1826160)

Catalog Number orb1826160

Category Antibodies

Description 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.

Clonality Monoclonal

Species/Host Mouse

Isotype Mouse IgG1, kappa

Conjugation Unconjugated

Reactivity Human

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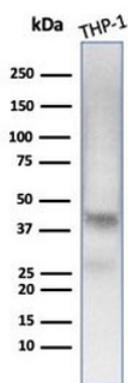
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| | |
|-----------------------------|---|
| Buffer/Preservatives | 0.2 mg/ml in 1X PBS with 0.1 mg/ml rAlbumin, 0.05% sodium azide |
| Purification | Protein A/G affinity |
| Immunogen | A recombinant partial protein (within amino acids 150-350) from the human protein was used as the immunogen for the Wilms Tumor 1 antibody. |
| UniProt ID | P19544 |
| Tested applications | ELISA, IHC-P, WB |
| Dilution range | ELISA (Order BSA-free format for coating), Western blot: 1-2ug/ml, Immunohistochemistry (FFPE): 1-2ug/ml for 30 minutes at RT |
| Application notes | Optimal dilution of the Wilms Tumor 1 antibody should be determined by the researcher. |
| Antibody Type | Primary Antibody |
| Clone Number | WT1/7451 |
| 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. |
| Note | For research use only |
| Expiration Date | 12 months from date of receipt. |



Western blot testing of human THP-1 cell lysate with Wilms Tumor 1 antibody (clone WT1/7451). Expected molecular weight 47-55 kDa.

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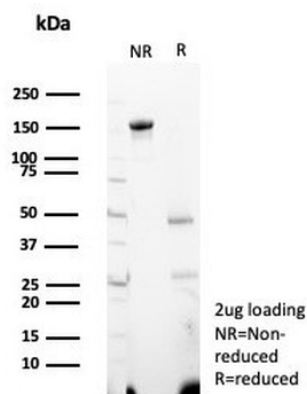
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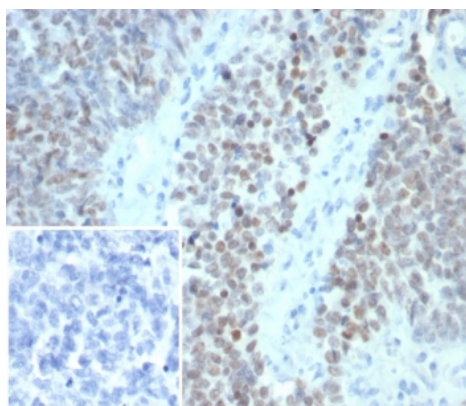
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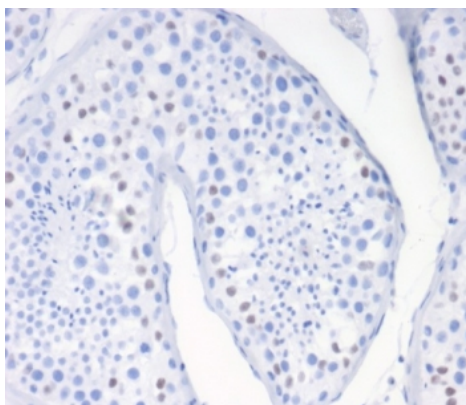
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SDS-PAGE analysis of purified, BSA-free Wilms Tumor 1 antibody (clone WT1/7451) as confirmation of integrity and purity.



IHC staining of FFPE human ovarian carcinoma tissue with Wilms Tumor 1 antibody (clone WT1/7451). Inset: PBS used in place of primary Ab (secondary Ab negative control). HIER: boil tissue sections in pH9 10 mM Tris with 1 mM EDTA for 20 min and allow to cool before testing.



IHC staining of FFPE human testis tissue with Wilms Tumor 1 antibody (clone WT1/7451). HIER: boil tissue sections in pH9 10 mM Tris with 1 mM EDTA for 20 min and allow to cool before testing.

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