

anti-WT

Cat #: HM1396
Rabbit polyclonal IgG
0.2 µg/µl, store at 4 °C

For research use only

BACKGROUND

Wilms' tumor (WT) is an embryonal malignancy of the kidney that affects 1 in 10,000 infants and, like retinoblastoma, is observed in both sporadic and inherited forms. The Wilms' tumor locus has been mapped at chromosome 11p13 as a tumor suppressor gene which encodes a DNA binding protein with four zinc fingers and a glutamine -proline rich amino terminus. The Wilms' tumor protein binds the DNA sequence GCGGGGCG, a recognition element common to the early growth response (Egr) family of Zn²⁺ finger transcriptional activators. However, in contrast to Egr transcription factors, WT1 behaves as a transcriptional repressor in transient transfection assays with synthetic promoter constructs.

SPECIFICITY

The antibody can be used in detecting WT of mouse, rat and human origin in Western blotting, immunoprecipitation and immunohistochemistry.

Molecular Weight of WT: 52 kDa.

Western blotting positive control: MCF7 cells.

IMMUNOGEN

A peptide at the carboxyl terminus of human WT protein.

STORAGE

This antibody is stable for 12 months when stored at 2-8°C.

REFERENCES

1. Gessler, M., Poustka, A., Cavenee, W., Neve, R.L., Orkin, S.H., and Bruns, G.A.P. 1990. Homozygous deletion in Wilms tumours of a zinc-finger gene identified by chromosome jumping. *Nature* 343: 774-778.
2. Call, K.M., Glaser, T., Ito, C.Y., Buckler, A.J., Pelletier, J., Haber, D.A., Rose, E.A., Kravitz, A., Yeager, H., Lewis, W.H., Jones, C., and Housman, D.E. 1990. Isolation and characterization of a zinc finger polypeptide gene at the human chromosome 11 Wilms' tumor locus. *Cell* 60: 509-520.
3. Morris, J.F., Madden, S.L., Tournay, O.E., Cook, D.M., Sukhatme, V.P., and Rauscher, F.J. III. 1991. Characterization of the zinc finger protein encoded by the WT1 Wilms' tumor locus. *Oncogene* 6: 2339-2348.
4. Little, M.H., Prosser, J., Condie, A., Smith, P.J., Heyning, V.V., and Hastie, N.D. 1992. Zinc finger point mutations within the WT1 gene in Wilms tumor patients. *Proc. Natl. Acad. Sci. USA* 89: 4791-4795.
5. Drummond, I.A., Madden, S.L., Rohwer-Nutter, P., Bell, G.I., Sukhatme, V.P., and Rauscher, F.J. II. 1992. Repression of the insulin-like growth factor II gene by the Wilms tumor suppressor WT1. *Science* 257: 674-678.
6. Wang, Z.Y., Madden, S.L., Deuel, T.F., and Rauscher, F.J. III. 1992. The Wilms' tumor gene product, WT1, represses

transcription of the platelet-derived growth factor A-chain gene. *J. Biol. Chem.* 267: 21999-22002.

7. Davies, R.C., Calvio, C., Bratt, E., Larsson, S.H., Lamond, A.I. and Hastie, N.D. (1998) WT1 interacts with the splicing factor U2AF65 in an isoform-dependent manner and can be incorporated into spliceosomes. *Genes Dev.* 12, 3217-3225.
8. Wagner, K.D., Wagner, N., Vidal, V.P., Schley, G., Wilhelm, D., Schedl, A., Englert, C. and Scholz, H. (2002) The Wilms' tumor gene Wt1 is required for normal development of the retina. *EMBO J.* 21, 1398-1405.
9. Wagner, K.J. and Roberts, S.G. (2004) Transcriptional regulation by the Wilms' tumor suppressor protein WT1. *Biochem. Soc. Trans.* 32 (PT 6), 932-935.
10. King-Underwood, L., Little, S., Baker, M., Clutterbuck, R., Delassus, S., Enver, T., Lebozer, C., Min, T., Moore, A., Schedl, A. and Pritchard-Jones, K. (2005) Wt1 is not essential for hematopoiesis in the mouse. *Leuk. Res.* 29, 803-812.

PRODUCTS FROM HYPROMATRIX, INC.**A. AntibodyArray™s:**

1. Signal Transduction AntibodyArray™
Catalog Number HM3000
2. Apoptosis AntibodyArray™
Catalog Number HM4000
3. Cell Cycle AntibodyArray™
Catalog Number HM5000

B. Staining AntibodyArray™s

1. Staining AntibodyArray™ I
Catalog Number HM8100
2. AntibodyArray Staining Apparatus
Catalog Number HM8000

C. Antibodies**1. HRP-conjugated antibodies**

- anti-phosphotyrosine
Catalog Number HM2040
- anti-phosphoserine
Catalog Number HM2070
- anti-phosphothreonine
Catalog Number HM2090

and more...

2. Primary antibodies

Hypromatrix offers a variety of high quality antibodies. For a complete list of antibodies and their specificities, please visit our web site at www.hypromatrix.com.

CONTACT

Hypromatrix, Inc.
100 Barber Avenue
Worcester, MA 01606
USA

Tel: 508-856-7900
Fax: 508-302-0748
Email: contact@hypromatrix.com
Web: www.hypromatrix.com