

# WT1 (C-19): sc-192



The Power to Question

## BACKGROUND

Wilms' tumor (WT) is an embryonal malignancy of the kidney that affects one 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 (WT1) binds the DNA sequence GCGGGGCG, a recognition element common to the early growth response (Egr) family of Zn<sup>2+</sup> finger transcriptional activators. However, in contrast to Egr transcription factors, WT1 behaves as a transcriptional repressor in transient transfection assays with synthetic promoter constructs.

## CHROMOSOMAL LOCATION

Genetic locus: WT1 (human) mapping to 11p13; Wt1 (mouse) mapping to 2 E3.

## SOURCE

WT1 (C-19) is an affinity purified rabbit polyclonal antibody raised against a peptide mapping at the C-terminus of WT1 of human origin.

## PRODUCT

Each vial contains 100 µg IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-192 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

Available as TransCruz reagent for Gel Supershift and ChIP applications, sc-192 X, 200 µg/0.1 ml; and as agarose conjugate for immunoprecipitation, sc-192 AC, 500 µg/ 0.25 ml agarose in 1 ml.

## APPLICATIONS

WT1 (C-19) is recommended for detection of WT1 of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500), immunohistochemistry (including paraffin-embedded sections) (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

WT1 (C-19) is also recommended for detection of WT1 in additional species, including equine, canine, bovine, porcine and avian.

Suitable for use as control antibody for WT1 siRNA (h): sc-36846, WT1 siRNA (m): sc-36845, WT1 shRNA Plasmid (h): sc-36846-SH, WT1 shRNA Plasmid (m): sc-36845-SH, WT1 shRNA (h) Lentiviral Particles: sc-36846-V and WT1 shRNA (m) Lentiviral Particles: sc-36845-V.

WT1 (C-19) X TransCruz antibody is recommended for Gel Supershift and ChIP applications.

Molecular Weight of WT1: 52 kDa.

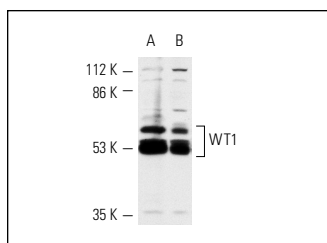
## STORAGE

Store at 4° C, **\*\*DO NOT FREEZE\*\***. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

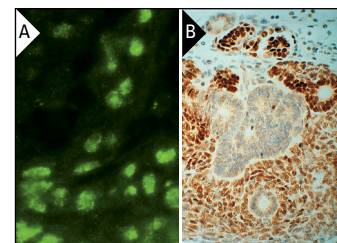
## RESEARCH USE

For research use only, not for use in diagnostic procedures.

## DATA



WT1 (C-19): sc-192. Western blot analysis of WT1 expression in MCF7 whole cell lysate (A) and nuclear extract (B).



WT1 (C-19): sc-192. Immunofluorescence staining of normal mouse kidney frozen section showing nuclear localization (A). Immunoperoxidase staining of formalin-fixed, paraffin-embedded pediatric renal tumor showing nuclear localization. Kindly provided by Pamila Ramani (B).

## SELECT PRODUCT CITATIONS

- Nachtigal, M.W., et al. 1998. Wilms' tumor 1 and DAX-1 modulate the orphan nuclear receptor SF-1 in sex-specific gene expression. *Cell* 93: 445-454.
- Kato, T., et al. 2011. Preservations of nephrin and synaptopodin by recombinant hepatocyte growth factor in podocytes for the attenuations of foot process injury and albuminuria in nephritic mice. *Nephrology* 16: 310-318.
- Leeuwis, J.W., et al. 2011. Direct visualization of Smad1/5/8-mediated transcriptional activity identifies podocytes and collecting ducts as major targets of BMP signalling in healthy and diseased kidneys. *J. Pathol.* 224: 121-132.
- Paces-Fessy, M., et al. 2012. Hnf1b and Pax2 cooperate to control different pathways in kidney and ureter morphogenesis. *Hum. Mol. Genet.* 21: 3143-3155.
- Dai, H.Y., et al. 2012. The roles of connective tissue growth factor and integrin-linked kinase in high glucose-induced phenotypic alterations of podocytes. *J. Cell. Biochem.* 113: 293-301.
- Heliot, C., et al. 2013. HNF1B controls proximal-intermediate nephron segment identity in vertebrates by regulating Notch signalling components and *Irx1/2*. *Development* 140: 873-885.
- Takeichi, M., et al. 2013. The transcription factors *Tbx18* and *Wt1* control the epicardial epithelial-mesenchymal transition through bi-directional regulation of *Slug* in murine primary epicardial cells. *PLoS ONE* 8: e57829.



Try **WT1 (H-1): sc-393498** or **WT1 (F-6): sc-7385**, our highly recommended monoclonal alternatives to WT1 (C-19).