

TCF-4 (N-20): sc-8631

BACKGROUND

T cell factors (TCFs) comprise a family of DNA-binding transcriptional activators that are essential for lymphoid cell development. These transcription factors are activated by the Wnt-1 and Wingless pathways and are characterized by the presence of a conserved protein motif, the high mobility group (HMG) 1 box, which mediates DNA binding. TCF-4 mainly localizes in the cytoplasm and is transported into the nucleus directly bound to β -catenin in a cooperative manner. This TCF-4/ β -catenin complex induces expression of Wnt target genes, including multiple cancer-associated genes. c-Jun also interacts with TCF-4 and β -catenin, and the phosphorylation-dependent interaction between c-Jun and TCF-4 regulates intestinal tumorigenesis by integrating JNK and APC/ β -catenin. TCF-4 is also implicated in bipolar affective disorder.

CHROMOSOMAL LOCATION

Genetic locus: TCF7L2 (human) mapping to 10q25.2; Tcf7l2 (mouse) mapping to 19 D2.

SOURCE

TCF-4 (N-20) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the N-terminus of TCF-4 of human origin.

PRODUCT

Each vial contains 200 μ g IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin. Also available as TransCruz reagent for Gel Supershift and ChIP applications, sc-8631 X, 200 μ g/0.1 ml.

Blocking peptide available for competition studies, sc-8631 P, (100 μ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

TCF-4 (N-20) is recommended for detection of TCF-4 of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 μ g per 100-500 μ g of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

TCF-4 (N-20) is also recommended for detection of TCF-4 in additional species, including bovine, porcine and avian.

Suitable for use as control antibody for TCF-4 siRNA (h): sc-43525, TCF-4 siRNA (m): sc-43526, TCF-4 shRNA Plasmid (h): sc-43525-SH, TCF-4 shRNA Plasmid (m): sc-43526-SH, TCF-4 shRNA (h) Lentiviral Particles: sc-43525-V and TCF-4 shRNA (m) Lentiviral Particles: sc-43526-V.

TCF-4 (N-20) X TransCruz antibody is recommended for Gel Supershift and ChIP applications.

Molecular Weight of TCF-4: 60 kDa.

Positive Controls: TCF-4 (h): 293T Lysate: sc-115204.

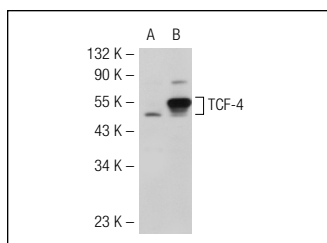
STORAGE

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

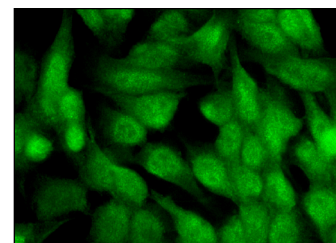
RESEARCH USE

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

DATA



TCF-4 (N-20): sc-8631. Western blot analysis of TCF-4 expression in non-transfected: sc-117752 (A) and human TCF-4 transfected: sc-115204 (B) 293T whole cell lysates.



TCF-4 (N-20): sc-8631. Immunofluorescence staining of methanol-fixed SW480 cells showing nuclear and cytoplasmic localization.

SELECT PRODUCT CITATIONS

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- Wöhrle, S., et al. 2007. Differential control of Wnt target genes involves epigenetic mechanisms and selective promoter occupancy by T-cell factors. *Mol. Cell. Biol.* 27: 8164-8177.
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- Hatzis, P., et al. 2008. Genome-wide pattern of TCF7L2/TCF4 chromatin occupancy in colorectal cancer cells. *Mol. Cell. Biol.* 28: 2732-2744.
- Bandapalli, O.R., et al. 2009. Transcriptional activation of the β -catenin gene at the invasion front of colorectal liver metastases. *J. Pathol.* 218: 370-379.
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- Ni, M., et al. 2013. Amplitude modulation of androgen signaling by c-MYC. *Genes Dev.* 27: 734-748.
- Ding, Z.Y., et al. 2014. Smad6 suppresses the growth and self-renewal of hepatic progenitor cells. *J. Cell. Physiol.* 229: 651-660.



Try **TCF-4 (D-4): sc-166699** or **TCF-4 (F-7): sc-271288**, our highly recommended monoclonal alternatives to TCF-4 (N-20). Also, for AC, HRP, FITC, PE, Alexa Fluor[®] 488 and Alexa Fluor[®] 647 conjugates, see **TCF-4 (D-4): sc-166699**.