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 µg IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.2% BSA. Blocking peptide available for competition studies, sc-8631 P, (100 µg 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 µg per 100-500 µg 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-43526-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

SELECT PRODUCT CITATIONS

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, RTC, PE, Alexa Fluor® 488 and Alexa Fluor® 647 conjugates, see TCF-4 (D-4): sc-166699.