
TCF7L2 Recombinant Rabbit mAb

Catalog Number: bsm-52543R

Target Protein: TCF7L2

Concentration: 1mg/ml

Form: Liquid

Host: Rabbit

Clonality: Recombinant

Clone No.: 2C2

Isotype: IgG

Applications: WB (1:500-1000), IHC-P (1:100-500), IHC-F (1:400-800), IF (1:50-200), Flow-Cyt (1 μ g/Test), ICC/IF (1:100)

Reactivity: Human (predicted:Mouse, Rat)

Predicted MW: 68 kDa

Entrez Gene: 6934

Swiss Prot: Q9NQB0

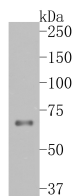
Purification: affinity purified by Protein A

Storage: 0.01M TBS (pH7.4) with 1% BSA, 0.02% Proclin300 and 50% Glycerol.

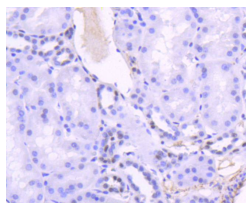
Shipped at 4°C. Store at -20°C for one year. Avoid repeated freeze/thaw cycles.

Background: TCF-4, transcription factor 4, is a basic helix-turn-helix transcription factor. This protein recognizes an Ephrussi-box ('E-box') binding site ('CANNTG') - a motif first identified in immunoglobulin enhancers. The gene for TCF-4 is expressed predominantly in pre-B-cells, although it is found in other tissues as well. Multiple alternatively spliced transcript variants that encode different proteins have been described. TCF4, also known as TCF7L2, is expressed widely during development. Gene targeting study indicates that it is required to maintain the crypt stem cells of the small intestine. TCF4 has many different splicing isoforms and they are expressed differentially in tissues and in cancers of different stages. Studies also indicate that variant of the TCF4 gene confers an increased risk of type 2 diabetes.

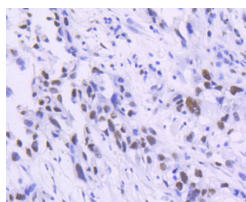
VALIDATION IMAGES



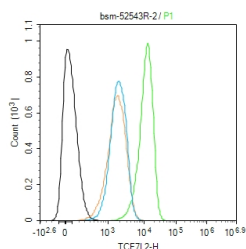
Western blot analysis of TCF7L2 on JAR cell lysates. Proteins were transferred to a PVDF membrane and blocked with 5% BSA in PBS for 1 hour at room temperature. The primary antibody (bsm-52543R, 1/500) was used in 5% BSA at room temperature for 2 hours. Goat Anti-Rabbit IgG - HRP Secondary Antibody at 1:5,000 dilution was used for 1 hour at room temperature.



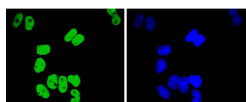
Immunohistochemical analysis of paraffin-embedded human kidney tissue using anti-TCF7L2 antibody. The section was pre-treated using heat mediated antigen retrieval with Tris-EDTA buffer (pH 8.0-8.4) for 20 minutes. The tissues were blocked in 5% BSA for 30 minutes at room temperature, washed with ddH₂O and PBS, and then probed with the primary antibody (bsm-52543R, 1/50) for 30 minutes at room temperature. The detection was performed using an HRP conjugated compact polymer system. DAB was used as the chromogen. Tissues were counterstained with hematoxylin and mounted with DPX.



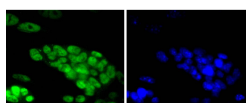
Immunohistochemical analysis of paraffin-embedded human breast carcinoma tissue using anti-TCF7L2 antibody. The section was pre-treated using heat mediated antigen retrieval with Tris-EDTA buffer (pH 8.0-8.4) for 20 minutes. The tissues were blocked in 5% BSA for 30 minutes at room temperature, washed with ddH₂O and PBS, and then probed with the primary antibody (bsm-52543R, 1/50) for 30 minutes at room temperature. The detection was performed using an HRP conjugated compact polymer system. DAB was used as the chromogen. Tissues were counterstained with hematoxylin and mounted with DPX.



Blank control (black line) :HepG2. Primary Antibody (green line): Mouse Anti-TCF7L2 antibody (bsm-52543R) Dilution:1:50; Secondary Antibody (white blue line) : Goat anti-Mouse IgG-AF488 Dilution: 0.5ug/Test. Isotype control (orange line) : Normal Rabbit IgG Protocol The cells were fixed with 4% PFA (10min at room temperature) and then permeabilized with 90% ice-cold methanol for 20 min at -20°C, The cells were then incubated in 5%BSA to block non-specific protein-protein interactions for 30 min at room temperature. Cells stained with Primary Antibody for 30 min at room temperature. The secondary antibody used for 40 min at room temperature. Acquisition of 20,000 events was performed.



ICC staining of TCF7L2 in HeLa cells (green). Formalin fixed cells were permeabilized with 0.1% Triton X-100 in TBS for 10 minutes at room temperature and blocked with 1% Blocker BSA for 15 minutes at room temperature. Cells were probed with the primary antibody (bsm-52543R, 1/50) for 1 hour at room temperature, washed with PBS. Alexa Fluor®488 Goat anti-Rabbit IgG was used as the secondary antibody at 1/1,000 dilution. The nuclear counter stain is DAPI (blue).



ICC staining of TCF7L2 in D3 cells (green). Formalin fixed cells were permeabilized with 0.1% Triton X-100 in TBS for 10 minutes at room temperature and blocked with 1% Blocker BSA for 15 minutes at room temperature. Cells were probed with the primary antibody (bsm-52543R, 1/50) for 1 hour at room temperature, washed with PBS. Alexa Fluor®488 Goat anti-Rabbit IgG was used as the secondary antibody at 1/1,000 dilution. The nuclear counter stain is DAPI (blue).

PRODUCT SPECIFIC PUBLICATIONS

[IF=10.75] Tao Zhang, et al. TCF7L2 promotes anoikis resistance and metastasis of gastric cancer by transcriptionally activating PLAUR. INT J BIOL SCI. 2022; 18(11): 4560–4577 IF ; Human . 35864968