

#2203 Store at -20°C

TCF1 (C63D9) Rabbit mAb

✓ 100 µl
(10 western blots)



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This product is intended for research purposes only. This product is not intended to be used for therapeutic or diagnostic purposes in humans or animals.

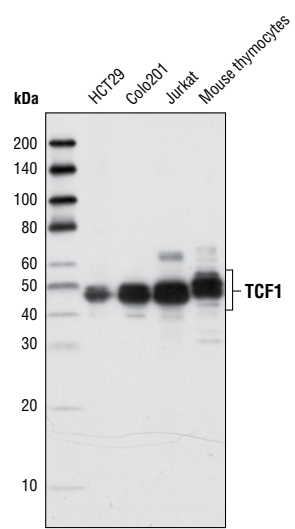
Applications	Species Cross-Reactivity*	Molecular Wt.	Isotype
W, IP, IHC-P, IF-IC, F Endogenous	H, M	48, 50 kDa	Rabbit IgG**

Background: LEF1/TCF are members of the high mobility group (HMG) DNA binding protein family of transcription factors which consists of four members: Lymphoid enhancer factor 1 (LEF1), T Cell Factor 1 (TCF1), TCF3 and TCF4 (1). LEF1 and TCF1 were originally identified as important factors regulating early lymphoid development (2) and are downstream factors in the Wnt signaling pathway. LEF1/TCF bind to Wnt response elements and provide a docking site for β-catenin which upon activation of Wnt signaling translocates to the nucleus and promotes the transcription of target genes (3). LEF1/TCF proteins are dynamically expressed during development and aberrant activation of the Wnt signaling pathway is involved in many types of cancers such as colon cancers (4,5).

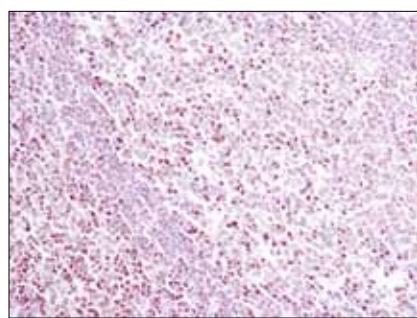
TCF1, also known as TCF7 (Transcription Factor 7), has several isoforms due to alternative splicing and transcription from an alternative promoter. The isoforms generated by the alternative promoter do not contain the amino-terminal β-catenin binding domain and therefore may function in a dominant negative manner (6). TCF1 displays dynamic expression both in the total amount and the type of isoforms expressed in T cells during development and differentiation (7).

Specificity/Sensitivity: TCF1 (C63D9) Rabbit mAb detects endogenous levels of total TCF1 protein. This antibody does not recognize the dominant negative isoforms of TCF1 lacking the amino-terminal β-catenin binding domain and does not cross-react with LEF1.

Source/Purification: Monoclonal antibody is produced by immunizing animals with a synthetic peptide corresponding to a region surrounding Pro95 of human TCF1 protein.



Western blot analysis of total cell lysates from HCT29, Colo201, Jurkat and mouse thymocytes using TCF1 (C63D9) Rabbit mAb.



Immunohistochemical analysis of paraffin-embedded human tonsil using TCF1 (C63D9) Rabbit mAb.

Entrez-Gene ID #6932
Swiss-Prot Acc. #P36402

Storage: Supplied in 10 mM sodium HEPES (pH 7.5), 150 mM NaCl, 100 µg/ml BSA, 50% glycerol and less than 0.02% sodium azide. Store at -20°C. Do not aliquot the antibody.

*Species cross-reactivity is determined by western blot.
**Anti-rabbit secondary antibodies must be used to detect this antibody.

Recommended Antibody Dilutions:

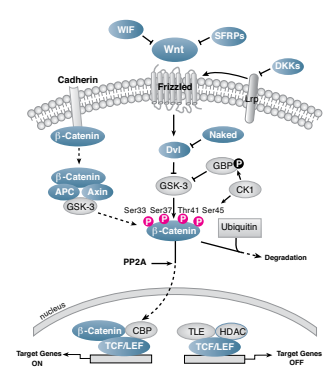
Western blotting	1:1000
Immunoprecipitation	1:50
Immunohistochemistry (Paraffin)	1:100†
Unmasking buffer:	Citrate
Antibody diluent:	SignalStain® Antibody Diluent #8112
Detection reagent:	SignalStain® Boost (HRP, Rabbit) #8114
†Optimal IHC dilutions determined using SignalStain® Boost IHC Detection Reagent.	
Immunofluorescence (IF-IC)	1:50
Flow Cytometry	1:100

For application specific protocols please see the web page for this product at www.cellsignal.com.

Please visit www.cellsignal.com for a complete listing of recommended companion products.

Background References:

- (1) Waterman, M.L. (2004) *Cancer Metastasis Rev.* 23, 41–52.
- (2) Schilham, M.W. and Clevers, H. (1998) *Semin. Immunol.* 10, 127–132.
- (3) Brantjes, H. et al. (2002) *Biol. Chem.* 383, 255–261.
- (4) Reya, T. and Clevers, H. (2005) *Nature* 434, 843–850.
- (5) Logan, C.Y. and Nusse, R. (2004) *Annu. Rev. Cell Dev. Biol.* 20, 781–810.
- (6) Waterman, M.L. *Cancer Metastasis Rev.* 23, 41–52.
- (7) Willinger, T. et al. (2006) *J. Immunol.* 176, 1439–1446.

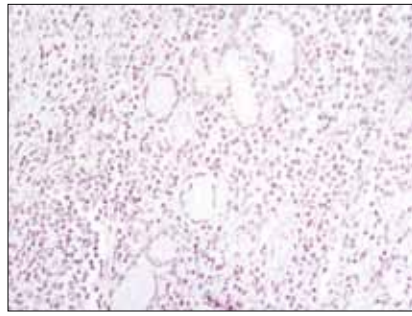
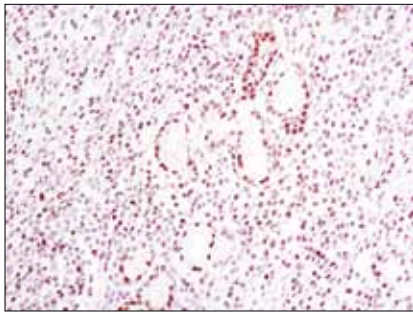


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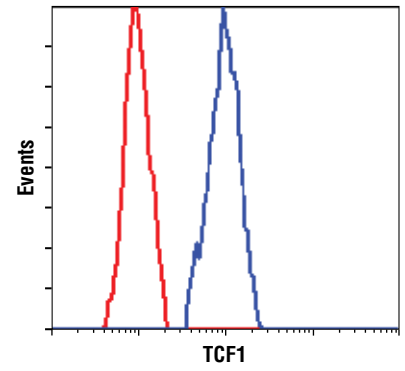
IMPORTANT: For western blots, incubate membrane with diluted antibody in 5% w/v BSA, 1X TBS, 0.1% Tween-20 at 4°C with gentle shaking, overnight.

Applications Key: W—Western IP—Immunoprecipitation IHC—Immunohistochemistry ChIP—Chromatin Immunoprecipitation IF—Immunofluorescence F—Flow cytometry E-P—ELISA-Peptide
Species Cross-Reactivity Key: H—human M—mouse R—rat Hm—hamster Mk—monkey Mi—mink C—chicken Dm—D. melanogaster X—Xenopus Z—zebrafish B—bovine
Dg—dog Pg—pig Sc—S. cerevisiae Ce—C. elegans Hr—Horse All—all species expected Species enclosed in parentheses are predicted to react based on 100% homology.

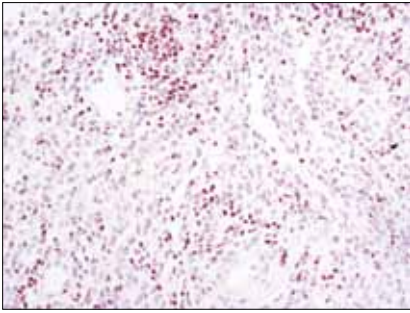
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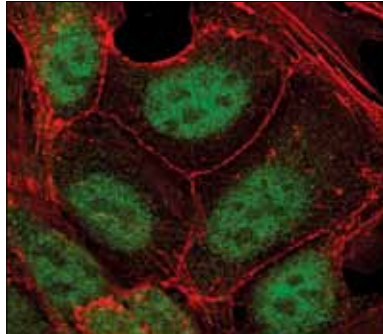
Immunohistochemical analysis of paraffin-embedded human lung carcinoma using TCF1 (C63D9) Rabbit mAb in the presence of control peptide (left) or antigen-specific peptide (right).



Flow cytometric analysis of untreated Jurkat cells using TCF1 (C63D9) Rabbit mAb (blue) compared to a nonspecific negative control antibody (red).



Immunohistochemical analysis of paraffin-embedded human Non-Hodgkin's lymphoma using TCF1 (C63D9) Rabbit mAb.



Confocal immunofluorescent analysis of DLD-1 cells using TCF1 (C63D9) Rabbit mAb (green). Actin filaments have been labeled with Alexa Fluor® 555 phalloidin (red).