10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

TCF3 Antibody (C-term)

Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP13991b

Product Information

Application	WB, FC, IHC-P, E
Primary Accession	P15923
Other Accession	NP_003191.1, NP_001129611.1
Reactivity	Human, Rat, Mouse
Predicted	Bovine, Canine
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Clone Names	RB33747
Calculated MW	67600
Antigen Region	506-534

Additional Information

Gene ID	6929
Other Names	Transcription factor E2-alpha, Class B basic helix-loop-helix protein 21, bHLHb21, Immunoglobulin enhancer-binding factor E12/E47, Immunoglobulin transcription factor 1, Kappa-E2-binding factor, Transcription factor 3, TCF-3, Transcription factor ITF-1, TCF3, BHLHB21, E2A, ITF1
Target/Specificity	This TCF3 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 506-534 amino acids from the C-terminal region of human TCF3.
Dilution	WB~~1:1000 FC~~1:10~50 IHC-P~~1:100~500 E~~Use at an assay dependent concentration.
Format	Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.
Storage	Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.
Precautions	TCF3 Antibody (C-term) is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	TCF3

Synonyms	BHLHB21, E2A, ITF1
Function	Transcriptional regulator involved in the initiation of neuronal differentiation and mesenchymal to epithelial transition (By similarity). Heterodimers between TCF3 and tissue-specific basic helix- loop-helix (bHLH) proteins play major roles in determining tissue- specific cell fate during embryogenesis, like muscle or early B-cell differentiation (By similarity). Together with TCF15, required for the mesenchymal to epithelial transition (By similarity). Dimers bind DNA on E-box motifs: 5'-CANNTG-3' (By similarity). Binds to the kappa-E2 site in the kappa immunoglobulin gene enhancer (PubMed:2493990). Binds to IEB1 and IEB2, which are short DNA sequences in the insulin gene transcription control region (By similarity).
Cellular Location	Nucleus.

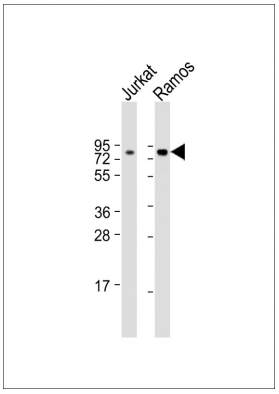
Background

The TCF3 gene, also called E2A, encodes 2 basic helix-loop-helix (bHLH) transcription factors, E12 and E47, through alternative splicing. E12 and E47 are involved in regulation of immunoglobulin gene expression (Bain et al., 1994 [PubMed 8001125]).

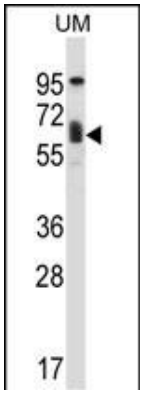
References

Hirose, K., et al. Blood 116(6):962-970(2010)
Pan, F., et al. Immunogenetics 62(4):237-251(2010)
Hauser, J., et al. Mol. Immunol. 47(5):1031-1038(2010)
Rittie, L., et al. Aging Cell 8(6):738-751(2009)
Pedraza, N., et al. J. Biol. Chem. 284(47):32980-32988(2009)

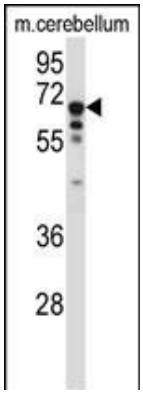
Images



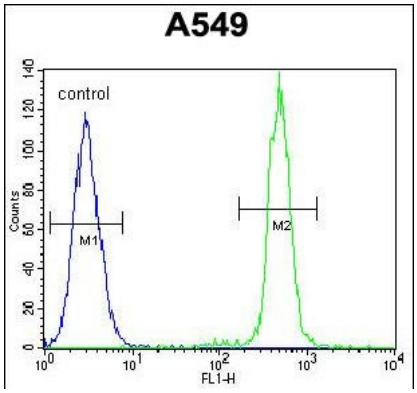
All lanes : Anti-TCF3 Antibody (C-term) at 1:1000 dilution Lane 1: Jurkat whole cell lysate Lane 2: Ramos whole cell lysate Lysates/proteins at 20 µg per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/10000 dilution. Predicted band size : 68 kDa Blocking/Dilution buffer: 5% NFDM/TBST.



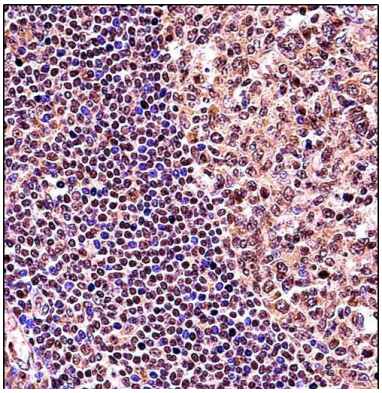
TCF3 Antibody (C-term) (Cat. #AP13991b) western blot analysis in human uterine tumor tissue lysates (35ug/lane).This demonstrates the TCF3 antibody detected the TCF3 protein (arrow).



TCF3 Antibody (C-term) (Cat. #AP13991b) western blot analysis in mouse cerebellum tissue lysates (35ug/lane).This demonstrates the TCF3 antibody detected the TCF3 protein (arrow).



TCF3 Antibody (C-term) (Cat. #AP13991b) flow cytometric analysis of A549 cells (right histogram) compared to a negative control cell (left histogram).FITC-conjugated goat-anti-rabbit secondary antibodies were used for the analysis.



TCF3 Antibody (C-term) (Cat. #AP13991b)immunohistochemistry analysis in formalin fixed and paraffin embedded human tonsil tissue followed by peroxidase conjugation of the secondary antibody and DAB staining.This data demonstrates the use of TCF3 Antibody (C-term) for immunohistochemistry. Clinical relevance has not been evaluated.

Citations

- ID3 may protect mice from anti GBM glomerulonephritis by regulating the differentiation of Th17 and Treg cells.

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.