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TCF7L2 Antibody (N-term)

Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP12416A

Product Information

Application	WB, E
Primary Accession	Q9NQB0
Other Accession	Q924A0, NP_001139756.1, NP_001139746.1
Reactivity	Human, Mouse
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Clone Names	RB19650
Calculated MW	67919
Antigen Region	61-90

Additional Information

Gene ID	6934
Other Names	Transcription factor 7-like 2, HMG box transcription factor 4, T-cell-specific transcription factor 4, T-cell factor 4, TCF-4, hTCF-4, TCF7L2, TCF4
Target/Specificity	This TCF7L2 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 61-90 amino acids from the N-terminal region of human TCF7L2.
Dilution	WB~~1:1000 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	TCF7L2 Antibody (N-term) is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	TCF7L2
Synonyms	TCF4
Function	Participates in the Wnt signaling pathway and modulates MYC expression by

	binding to its promoter in a sequence-specific manner. Acts as a repressor in the absence of CTNNB1, and as activator in its presence. Activates transcription from promoters with several copies of the Tcf motif 5'-CCTTTGATC-3' in the presence of CTNNB1. TLE1, TLE2, TLE3 and TLE4 repress transactivation mediated by TCF7L2/TCF4 and CTNNB1. Expression of dominant-negative mutants results in cell-cycle arrest in G1. Necessary for the maintenance of the epithelial stem-cell compartment of the small intestine.
Cellular Location	Nucleus, PML body. Nucleus. Note=Diffuse pattern. Colocalizes with SUMO1 and PIAS4 in a subset of PML (promyelocytic leukemia) nuclear bodies
Tissue Location	Detected in epithelium from small intestine, with the highest expression at the top of the crypts and a gradient of expression from crypt to villus. Detected in colon epithelium and colon cancer, and in epithelium from mammary gland and carcinomas derived therefrom.

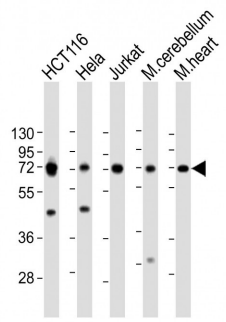
Background

This gene encodes a high mobility group (HMG) box-containing transcription factor that plays a key role in the Wnt signaling pathway. The protein has been implicated in blood glucose homeostasis. Genetic variants of this gene are associated with increased risk of type 2 diabetes. Several transcript variants encoding multiple different isoforms have been found for this gene.

References

Hansson, O., et al. Curr. Diab. Rep. 10(6):444-451(2010)
Heni, M., et al. Diabetes (2010) In press :
Potapov, V.A., et al. Genetika 46(8):1123-1131(2010)
Kucharska-Newton, A.M., et al. J Obes 2010 (2010) :
Zabaneh, D., et al. PLoS ONE 5 (8), E11961 (2010) :

Images



All lanes : Anti-TCF7L2 Antibody (N-term) at 1:2000 dilution Lane 1: HCT116 whole cell lysate Lane 2: Hela whole cell lysate Lane 3: Jurkat whole cell lysate Lane 4: mouse cerebellum lysate Lane 5: mouse heart 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.