

TCF7L2 Antibody (N-term)

Affinity Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP12416A

Specification

TCF7L2 Antibody (N-term) - Product Information

Application Primary Accession Other Accession Reactivity Host Clonality Isotype Calculated MW Antigen Region WB,E <u>O9NOB0</u> <u>O924A0</u>, <u>NP_001139756.1</u>, <u>NP_001139746.1</u> Human, Mouse Rabbit Polyclonal Rabbit IgG 67919 61-90

TCF7L2 Antibody (N-term) - 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

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.

TCF7L2 Antibody (N-term) - 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

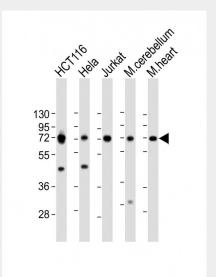
Detected in epithelium from small intestine, with the highest expression at the top of the crypts and a gradient of expression from crypt to villus. Detected in colon epithelium and colon cancer, and in epithelium from mammary gland and carcinomas derived therefrom.

TCF7L2 Antibody (N-term) - Protocols

Provided below are standard protocols that you may find useful for product applications.

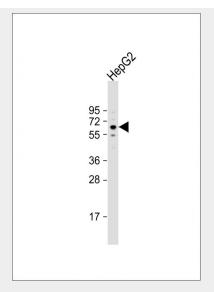
- <u>Western Blot</u>
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- <u>Cell Culture</u>

TCF7L2 Antibody (N-term) - Images

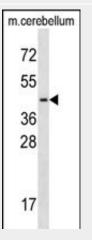


All lanes : Anti-TCF7L2 Antibody (N-term) at 1:2000 dilution Lane 1: HCT116 whole cell lysate Lane 2: Hela whole cell lysate Lane 3: Jurkat whole cell lysate Lane 4: mouse cerebellum lysate Lane 5: mouse heart lysate Lysates/proteins at 20 μ g per lane. Secondary Goat Anti-Rabbit lgG, (H+L), Peroxidase conjugated at 1/10000 dilution. Predicted band size : 68 kDa Blocking/Dilution buffer: 5% NFDM/TBST.





Anti-TCF7L2 Antibody (N-term) at 1:2000 dilution + HepG2 whole cell lysate Lysates/proteins at 20 μ g 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.



TCF7L2 Antibody (N-term) (Cat. #AP12416a) western blot analysis in mouse cerebellum tissue lysates (35ug/lane).This demonstrates the TCF7L2 antibody detected the TCF7L2 protein (arrow).

TCF7L2 Antibody (N-term) - 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.

TCF7L2 Antibody (N-term) - 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) :