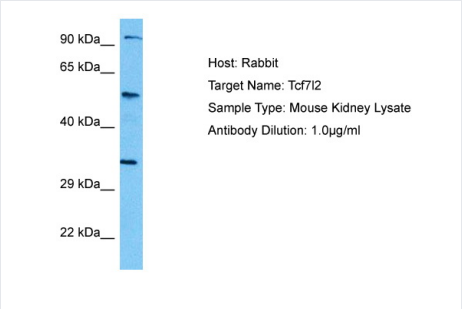
TCF7L2 Antibody – Rabbit Polyclonal

PRODUCT OVERVIEW

Product Name	TCF7L2, Polyclonal Antibody
Full Product Name	TCF7L2 Antibody - N-terminal region
Product Gene Name	anti-TCF7L2 antibody
Product Synonym Gene Name	TCF4; TCF-4
Immunogen Sequence	Synthetic peptide located within the following region: MPQLNGGGGD DLGANDELIS FKDEGEQEEK SSENSSAERD LADVKSSLVN
Clonality	Polyclonal
Host	Rabbit
Species Reactivity	Human
Form/Format	Liquid. Purified antibody supplied in 1x PBS buffer with 0.09% (w/v) sodium azide and 2% sucrose.
Purity/Purification	Affinity purified
Preparation and Storage	For short term use, store at 2-8 degree C up to 1 week. For long term storage, store at -20 degree C in small aliquots to prevent freeze-thaw cycles.
Antibody/Peptide Pairs	TCF7L2 peptide (MBS3229726) is used for blocking the activity of TCF7L2 antibody (MBS3204761)
Molecular Weight	68 kDa
OMIM	phenotype 602228
3D Structure	ModBase 3D Structure for Q9NQB0
Homology	Cow: 100%; Dog: 75%; Guinea Pig: 75%; Human: 100%; Mouse: 100%; Pig: 100%; Rat: 100%; Zebrafish: 100%
Immunogen	The immunogen is a synthetic peptide directed towards the N terminal region of human TCF7L2
Product Categories/Family for anti-TCF7L2 antibody	Polyclonal; Transcription Factor; Signaling Intermediate; Disease Related
Applications Tested/Suitable for anti-TCF7L2 antibody	Western Blot (WB)
Related Product Information for anti-TCF7L2 antibody	This is a rabbit polyclonal antibody against Tcf7l2. It was validated on Western Blot Target Description: 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.
Other Notes	Small volumes of anti-TCF7L2 antibody vial(s) may occasionally become entrapped in the seal of the product vial during shipment and storage. If necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the container`s cap. Certain products may require to ship with dry ice and additional dry ice fee may apply.
Searchable Terms for TCF7L2 purchase	MBS3204761 is an antibody targeting TCF7L2. Also known as TCF7L2 Antibody - N-terminal region. Reactive in Human. Host: Rabbit.



Western Blot (WB) of anti-TCF7L2 antibody
Host: MouseTarget Name: TCF7L2Sample Tissue: Mouse KidneyAntibody Dilution: 1ug/ml

ADDITIONAL DETAILS

NCBI/Uniprot data below describe general gene information for TCF7L2. It may not necessarily be applicable to this product.

NCBI GI #	530394211
NCBI GeneID	6934
NCBI Accession #	XP_005270141
UniProt Primary Accession #	Q9NQB0
UniProt Related Accession #	Q9NQB0
GenBank Nucleotide #	XM_005270084.1
NCBI Official Synonym Full Names	transcription factor 7 like 2
NCBI Official Symbol	TCF7L2
NCBI Official Synonym Symbols	TCF4; TCF-4
UniProt Protein Name	Transcription factor 7-like 2
UniProt Synonym Protein Names	HMG box transcription factor 4; T-cell-specific transcription factor 4; T-cell factor 4; TCF-4; hTCF-4
Protein Family	Transcription factor
UniProt Gene Name	TCF7L2
UniProt Synonym Gene Names	TCF4; T-cell factor 4; TCF-4; hTCF-4
UniProt Entry Name	TF7L2_HUMAN
NCBI Protein Information	transcription factor 7-like 2
NCBI Summary for TCF7L2	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.[provided by RefSeq, Oct 2010]

UniProt Comments for TCF7L2	TCF7L2: Participates in the Wnt signaling pathway and modulates MYC expression by binding to its promoter in a sequence-specific manner. Acts as 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. Interacts with TGFB1I1. Interacts with CTNNB1 (via the armadillo repeat); forms stable transcription complex. Interacts with EP300. Interacts with NLK. Interacts with CCDC85B (probably through the HMG box); prevents interaction with CTNNB1. Interacts with TNIK. Interacts with MAD2L2; prevents TCF7L2/TCF4 binding to promZIPK/DAPK3oters, negatively modulating its transcriptional activity. Interacts with ZIPK/DAPK3. Interacts with XIAP/BIRC4 and TLE3. 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. Belongs to the TCF/LEF family. 10 isoforms of the human protein are produced by alternative splicing. Protein type: Apoptosis; Motility/polarity/chemotaxis; DNA-binding; Transcription factor; Cell development/differentiation; Cell cycle regulation Chromosomal Location of Human Ortholog: 10q25.3 Cellular Component: nucleoplasm; transcription factor complex; PML body; cytoplasm; nuclear chromatin; nucleus Molecular Function: protein binding; sequence-specific DNA binding; gamma-catenin binding; beta-catenin binding; chromatin binding; transcription factor binding; transcription factor activity; protein kinase binding; nuclear hormone receptor binding Biological Process: neural tube development; skin development; glycogen metabolic process; fat cell differentiation; regulation of myelination; somatic stem cell maintenance; positive regulation of apoptosis; Wnt receptor signaling pathway through beta-catenin; glucose homeostasis; maintenance of DNA repeat elements; negative regulation of BMP signaling pathway; post-embryonic development; embryonic digestive tract morphogenesis; response to glucose stimulus; cell cycle arrest; oligodendrocyte development; embryonic hindgut morphogenesis; embryonic genitalia morphogenesis; regulation of hormone metabolic process; transcription, DNA-dependent; regulation of smooth muscle cell proliferation; negative regulation of transcription factor activity; glucose metabolic process; positive regulation of insulin secretion; cellular response to starvation; negative regulation of organ growth; negative regulation of fat cell differentiation; regulation of transcription from RNA polymerase II promoter; positive regulation of transcription from RNA polymerase II promoter; negative regulation of transcription, DNA-dependent; positive regulation of epithelial cell proliferation; secretory granule localization; myoblast cell fate commitment; positive regulation of protein binding; negative regulation of fibroblast growth factor receptor signaling pathway; regulation of oligodendrocyte differentiation; negative regulation of transcription from RNA polymerase II promoter; bone mineralization; positive regulation of protein export from nucleus; positive regulation of gluconeogenesis; pancreas development; blood vessel development; multicellular organism growth; odontogenesis of dentine-containing teeth; positive regulation of protein kinase B signaling cascade; cell proliferation; generation of neurons; pituitary gland development; regulation of skeletal muscle development; brain development Disease: Diabetes Mellitus, Noninsulin-dependent
Research Articles on TCF7L2	**1.** The type 2 diabetes-associated TCF7L2 locus influences progression of islet autoimmunity in type 1 diabetes, with differential effects by autoantibody specificity and interaction by obesity/overweight.
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