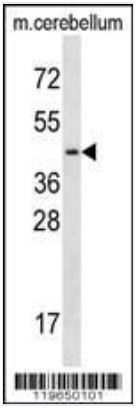
TCF7L2 Antibody – Rabbit Polyclonal

PRODUCT OVERVIEW

Product Name	TCF7L2, Polyclonal Antibody
Full Product Name	TCF7L2, NT (TCF7L2, TCF4, Transcription factor 7-like 2, HMG box transcription factor 4, T-cell-specific transcription factor 4)
Product Gene Name	anti-TCF7L2 antibody
Product Synonym Names	Anti -TCF7L2, NT (TCF7L2, TCF4, Transcription factor 7-like 2, HMG box transcription factor 4, T-cell-specific transcription factor 4)
Clonality	Polyclonal
Isotype	IgG
Host	Rabbit
Species Reactivity	Mouse
Form/Format	Supplied as a liquid in PBS, pH 7.2, 0.09% sodium azide.
Purity/Purification	Affinity Purified Purified by Protein A affinity chromatography.
Specificity	Mouse
Preparation and Storage	May be stored at 4 degree C for short-term only. Aliquot to avoid repeated freezing and thawing. Store at -20 degree C. Aliquots are stable for 12 months. For maximum recovery of product, centrifuge the original vial after thawing and prior to removing the cap.
Molecular Weight	67,919 Da
Chromosome Location	Chromosome: 10; NC_000010.10 (114709978..114927437). Location: 10q25.3
OMIM	125853
3D Structure	ModBase 3D Structure for Q9NQB0
Immunogen	TCF7L2 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 60-90 amino acids from the N-terminal region of human TCF7L2.
Product Categories/Family for anti-TCF7L2 antibody	Antibodies; Abs to Transcription Factors
Applications Tested/Suitable for anti-TCF7L2 antibody	ELISA (EL/EIA), Western Blot (WB)
Application Notes for anti-TCF7L2 antibody	Suitable for use in Western Blot, ELISA Dilution: ELISA: 1:1,000 Western Blot: 1:100-500
Related Product Information for anti-TCF7L2 antibody	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	MBS6000620 is an antibody targeting TCF7L2. Also known as TCF7L2, NT (TCF7L2, TCF4, Transcription factor 7-like 2, HMG box transcription factor 4, T-cell-specific transcription factor 4). Reactive in Mouse. Host: Rabbit.



Western Blot (WB) of anti-TCF7L2 antibody
TCF7L2 Antibody (N-term) western blot analysis in mouse cerebellum tissue lysates (35ug/lane).This demonstrates the TCF7L2 antibody detected the TCF7L2 protein (arrow).

ADDITIONAL DETAILS

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

NCBI GI #	309384257
NCBI GeneID	6934
NCBI Accession #	NP_001185457.1
UniProt Primary Accession #	Q9NQB0
UniProt Secondary Accession #	O00185; Q9NQB1; Q9NQB2; Q9NQB3; Q9NQB4; Q9NQB5; Q9NQB6; Q9NQB7; Q9ULC2; F8W742; F8W7T5
UniProt Related Accession #	Q9NQB0
GenBank Nucleotide #	NM_001198528.1
NCBI Official Full Name	transcription factor 7-like 2 isoform 10
NCBI Official Synonym Full Names	transcription factor 7-like 2 (T-cell specific, HMG-box)
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
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; hTCF-4; T-cell factor 4; T-cell factor-4 variant A; T-cell factor-4 variant B; T-cell factor-4 variant C; T-cell factor-4 variant D; T-cell factor-4 variant E; T-cell factor-4 variant F; T-cell factor-4 variant G; T-cell factor-4 variant H; T-cell factor-4 variant I; T-cell factor-4 variant J; T-cell factor-4 variant K; T-cell factor-4 variant L; T-cell factor-4 variant M; T-cell factor-4 variant X2; HMG box transcription factor 4; T-cell-specific transcription factor 4

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: Cell development/differentiation; Cell cycle regulation; Motility/polarity/chemotaxis; Transcription factor; DNA-binding; Apoptosis Chromosomal Location of Human Ortholog: 10q25.3 Cellular Component: nucleoplasm; PML body; transcription factor complex; 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: skin development; glycogen metabolic process; neural tube development; 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; oligodendrocyte development; cell cycle arrest; embryonic hindgut morphogenesis; embryonic genitalia morphogenesis; regulation of hormone metabolic process; regulation of smooth muscle cell proliferation; transcription, DNA-dependent; negative regulation of transcription factor activity; glucose metabolic process; positive regulation of insulin secretion; negative regulation of organ growth; negative regulation of fat cell differentiation; cellular response to starvation; 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 LRP6(R611C) mutation diminishes TCF7L2-dependent transcription of the IR while it increases the stability of IGFR and enhances mTORC1 activity.
Precautions	All of MyBioSource's Products are for scientific laboratory research purposes and are not for diagnostic, therapeutics, prophylactic or in vivo use. Through your purchase, you expressly represent and warrant to MyBioSource that you will properly test and use any Products purchased from MyBioSource in accordance with industry standards. MyBioSource and its authorized distributors reserve the right to refuse to process any order where we reasonably believe that the intended use will fall outside of our acceptable guidelines.
Disclaimer	While every efforts were made to ensure the accuracy of the information provided in this datasheet, MyBioSource will not be liable for any omissions or errors contained herein. MyBioSource reserves the right to make changes to this datasheet at any time without prior notice. It is the responsibility of the customer to report product performance issues to MyBioSource within 30 days of receipt of the product. Please visit our Terms & Conditions page for more information.

Product Note	Select online data sheet information is drawn from bioinformatics databases, occasionally resulting in ambiguous or non-relevant product information. It is the responsibility of the customer to review, verify, and evaluate the information to make sure it matches their requirements before purchasing the kit. Our ELISA Kit assays are dynamic research tools and sometimes they may be updated and improved. If the format of this assay is important to you then please request the current manual or contact our technical support team with a presales inquiry before placing an order. We will confirm the current details of the assay. We cannot guarantee the sample manual posted online is the most current manual, it is intended to serve as an example only. Please refer to the instructions For Use provided with the assay kit for precise details.

For Research Use Only. Not for use in diagnostic or therapeutic procedures.

MyBioSource | Tel: +1.858.633.0165 | Fax: +1.858.633.0166 | mybiosource.com/contact-us
Online datasheet: https://www.mybiosource.com/polyclonal-mouse-antibody/tcf7l2/6000620