

## ARG41987 anti-TCF7L2 antibody

Package: 100 µl  
Store at: -20°C

### Summary

Product Description	Rabbit Polyclonal antibody recognizes TCF7L2
Tested Reactivity	Hu, Ms, Rat
Tested Application	FACS, ICC/IF, IHC-P, IP, WB
Host	Rabbit
Clonality	Polyclonal
Isotype	IgG
Target Name	TCF7L2
Species	Human
Immunogen	Synthetic peptide of Human TCF7L2.
Conjugation	Un-conjugated
Alternate Names	TCF4; TCF-4; T-cell factor 4; hTCF-4; HMG box transcription factor 4; T-cell-specific transcription factor 4; Transcription factor 7-like 2

### Application Instructions

Application table	Application	Dilution
	FACS	1:50
	ICC/IF	1:50 - 1:200
	IHC-P	1:50 - 1:200
	IP	1:50
	WB	1:5000 - 1:20000
Application Note	* The dilutions indicate recommended starting dilutions and the optimal dilutions or concentrations should be determined by the scientist.	
Positive Control	Jurkat	
Observed Size	~ 68 kDa	

### Properties

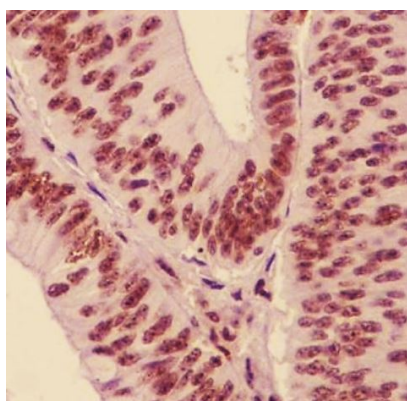
Form	Liquid
Purification	Affinity purified.
Buffer	PBS (pH 7.4), 150 mM NaCl, 0.02% Sodium azide and 50% Glycerol.
Preservative	0.02% Sodium azide
Stabilizer	50% Glycerol

Storage instruction	For continuous use, store undiluted antibody at 2-8°C for up to a week. For long-term storage, aliquot and store at -20°C. Storage in frost free freezers is not recommended. Avoid repeated freeze/thaw cycles. Suggest spin the vial prior to opening. The antibody solution should be gently mixed before use.
Note	For laboratory research only, not for drug, diagnostic or other use.

## Bioinformation

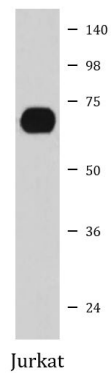
Gene Symbol	TCF7L2
Gene Full Name	transcription factor 7-like 2 (T-cell specific, HMG-box)
Background	This gene encodes a high mobility group (HMG) box-containing transcription factor that plays a key role in the Wnt signaling pathway. The protein has been implicated in blood glucose homeostasis. Genetic 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.[provided by RefSeq, Oct 2010]
Function	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'-CCTTGATC-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. [UniProt]
Calculated Mw	68 kDa
PTM	In vitro, phosphorylated by TNIK.  Phosphorylated at Thr-201 and/or Thr-212 by NLK. Phosphorylation by NLK at these sites inhibits DNA-binding by TCF7L2/TCF4, thereby preventing transcriptional activation of target genes of the canonical Wnt/beta-catenin signaling pathway.  Polysumoylated. Sumoylation is enhanced by PIAS family members and desumoylation is enhanced by SENP2. Sumoylation/desumoylation regulates TCF7L2/TCF4 transcription activity in the Wnt/beta-catenin signaling pathway without altering interaction with CTNNB1 nor binding to DNA. [UniProt]
Cellular Localization	Nucleus, PML body. Note=Diffuse pattern. Colocalizes with SUMO1 and PIAS4 in a subset of PML (promyelocytic leukemia) nuclear bodies. [UniProt]

## Images



ARG41987 anti-TCF7L2 antibody IHC-P image

Immunohistochemistry: Paraffin-embedded Human colonic cancer tissue stained with ARG41987 anti-TCF7L2 antibody.



#### ARG41987 anti-TCF7L2 antibody WB image

Western blot: Jurkat cell lysate stained with ARG41987 anti-TCF7L2 antibody.