10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

TCF7 Antibody

Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP51552

Product Information

Application	WB, IP, IHC-P
Primary Accession	P36402
Reactivity	Human
Host	Rabbit
Clonality	Polyclonal
Calculated MW	41552

Additional Information

Gene ID	6932
Other Names	Transcription factor 7, TCF-7, T-cell-specific transcription factor 1, T-cell factor 1, TCF-1, TCF7, TCF1
Target/Specificity	KLH-conjugated synthetic peptide encompassing a sequence within the N-term region of human TCF7. The exact sequence is proprietary.
Dilution	WB~~1:1000 IP~~N/A IHC-P~~N/A
Format	0.01M PBS, pH 7.2, 0.09% (W/V) Sodium azide, Glycerol 50%
Storage	Store at -20 °C.Stable for 12 months from date of receipt

Protein Information

Name	TCF7 (HGNC:11639)
Synonyms	TCF1
Function	Transcriptional activator involved in T-cell lymphocyte differentiation. Necessary for the survival of CD4(+) CD8(+) immature thymocytes. Isoforms lacking the N-terminal CTNNB1 binding domain cannot fulfill this role. Binds to the T-lymphocyte-specific enhancer element (5'-WWCAAAG-3') found in the promoter of the CD3E gene. Represses expression of the T-cell receptor gamma gene in alpha-beta T- cell lineages (By similarity). Required for the development of natural killer receptor-positive lymphoid tissue inducer T-cells (By similarity). TLE1, TLE2, TLE3 and TLE4 repress transactivation mediated by TCF7 and CTNNB1. May also act as feedback transcriptional repressor of CTNNB1 and TCF7L2 target genes.
Cellular Location	Nucleus.

Tissue Location	Predominantly expressed in T-cells. Also detected in proliferating intestinal epithelial cells and in the basal epithelial cells of mammary gland epithelium

Background

Transcriptional activator involved in T-cell lymphocyte differentiation. Necessary for the survival of CD4(+) CD8(+) immature thymocytes. Isoforms lacking the N-terminal CTNNB1 binding domain cannot fulfill this role. Binds to the T- lymphocyte-specific enhancer element (5'-WWCAAAG-3') found in the promoter of the CD3E gene. May also act as feedback transcriptional repressor of CTNNB1 and TCF7L2 target genes. TLE1, TLE2, TLE3 and TLE4 repress transactivation mediated by TCF7 and CTNNB1.

References

van de Wetering M.,et al.EMBO J. 10:123-132(1991).
van de Wetering M.,et al.J. Biol. Chem. 267:8530-8536(1992).
Mayer K.,et al.Biochim. Biophys. Acta 1263:169-172(1995).
Ota T.,et al.Nat. Genet. 36:40-45(2004).
Mural R.J.,et al.Submitted (SEP-2005) to the EMBL/GenBank/DDBJ databases.