

## Product datasheet for **AP06685PU-M**

### **HNF1 alpha (HNF1A) Rabbit Polyclonal Antibody**

#### **Product data:**

Product Type:	Primary Antibodies
Applications:	IHC, WB
Recommended Dilution:	<b>Western blot:</b> 1/500-1/1000. <b>Immunohistochemistry on paraffin sections:</b> 1/50-1/200.
Reactivity:	Human, Mouse
Host:	Rabbit
Clonality:	Polyclonal
Immunogen:	Synthetic peptide, corresponding to amino acids N-terminus of Human TCF-1.
Specificity:	This antibody detects endogenous levels of TCF-1 protein. (region surrounding Phe26)
Formulation:	Phosphate buffered saline (PBS), pH 7.2. State: Aff - Purified State: Liquid purified Ig fraction Preservative: 0.05% sodium azide
Concentration:	1.0 mg/ml
Purification:	Affinity-chromatography using epitope-specific immunogen and the purity is > 95% (by SDS-PAGE)
Conjugation:	Unconjugated
Storage:	Store undiluted at 2-8°C for one month or (in aliquots) at -20°C for longer. Avoid repeated freezing and thawing.
Stability:	Shelf life: one year from despatch.
Predicted Protein Size:	~ 42 kDa
Gene Name:	HNF1 homeobox A
Database Link:	<a href="#">Entrez Gene 6927 Human P20823</a>



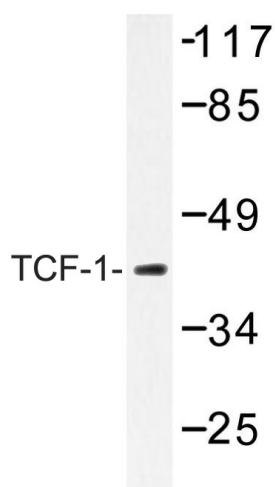
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**Background:**

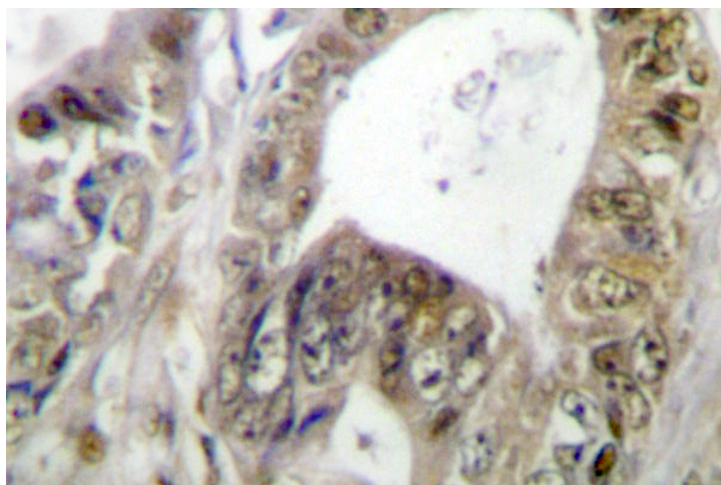
T-cell factor-1 (TCF-1) is a DNA-binding transcriptional activator that is essential for lymphoid cell development. The TCF family of transcription factors are activated by the Wnt-1 and Wingless pathways and are characterized by the presence of a conserved protein motif, the high mobility group (HMG) 1 box, which mediates DNA binding. Several alternative splice variants of TCF-1 have been identified, including TCF-1A, which share a conserved amino terminus and differ in the carboxy terminal sequences. The Wnt mediated signaling pathway induces cytosolic  $\beta$ -catenin binding to TCF proteins within the nucleus, leading to the enhanced expression of the Wnt target genes. The  $\beta$ -catenin-TCF complexes are negatively regulated by the adenomatous polyposis coli (APC) tumor suppressor protein, which phosphorylates  $\beta$ -catenin and, in turn, increases the degradation of cytosolic  $\beta$ -catenin and inhibits the transcriptional activity of the TCF proteins. Mutations in the APC gene, which are commonly observed in colorectal carcinomas, disrupt this regulatory pathway and correlate with an accumulation of  $\beta$ -catenin and the increased activation of the TCF target genes.

**Synonyms:**

HNF1A, LFB1, LF-B1, TCF-1, Transcription factor 1

**Product images:**


Western blot (WB) analysis of TCF-1 antibody in extracts from HUVEC cells.



Immunohistochemistry (IHC) analyzes of TCF-1 antibody in paraffin-embedded human colon carcinoma tissue.