

# Rabbit Anti-LEF-1 Polyclonal Antibody

Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP52338

## **Product Information**

Application WB, E Primary Accession Q9UJU2

**Reactivity** Human, Mouse, Rat

HostRabbitClonalityPolyclonalCalculated MW44201

## **Additional Information**

**Gene ID** 51176

Other Names LEF-1; TCF1; TCF7L3; TCF1ALPHA; Lymphoid enhancer-binding factor 1; T

cell-specific transcription factor 1-alpha; TCF1-alpha; LEF1

**Dilution** WB=1:500-2000,Flow-Cyt=1ug/test,ELISA=1:5000-10000

Format 0.01 M TBS(pH7.4) with 1% BSA, 0.09% (W/V) sodium azide and 50% Glyce

**Storage** Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. When

reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody

is stable for at least two weeks at 2-4 °C.

### **Protein Information**

Name LEF1 ( HGNC:6551)

**Function** Transcription factor that binds DNA in a sequence-specific manner

(PubMed:<u>2010090</u>). Participates in the Wnt signaling pathway (By similarity). Activates transcription of target genes in the presence of CTNNB1 and EP300 (By similarity). PIAG antagonizes both Wnt-dependent and Wnt-independent

activation by LEF1 (By similarity). TLE1, TLE2, TLE3 and TLE4 repress

transactivation mediated by LEF1 and CTNNB1 (PubMed: 11266540). Regulates T-cell receptor alpha enhancer function (PubMed: 19653274). Required for IL17A expressing gamma-delta T-cell maturation and development, via binding to regulator loci of BLK to modulate expression (By similarity). Acts as a positive regulator of odontoblast differentiation during mesenchymal tooth

germ formation, expression is repressed during the bell stage by

MSX1-mediated inhibition of CTNNB1 signaling (By similarity). May play a role

in hair cell differentiation and follicle morphogenesis (By similarity).

**Cellular Location** Nucleus {ECO:0000255 | PROSITE-ProRule:PRU00267}. Note=Found in nuclear

bodies upon PIASG binding.

#### **Tissue Location**

Detected in thymus. Not detected in normal colon, but highly expressed in colon cancer biopsies and colon cancer cell lines. Expressed in several pancreatic tumors and weakly expressed in normal pancreatic tissue. Isoforms 1 and 5 are detected in several pancreatic cell lines.

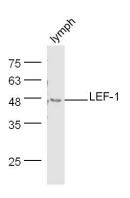
# **Background**

Participates in the Wnt signaling pathway. Activates transcription of target genes in the presence of CTNNB1 and EP300. May play a role in hair cell differentiation and follicle morphogenesis. TLE1, TLE2, TLE3 and TLE4 repress transactivation mediated by LEF1 and CTNNB1. Regulates T-cell receptor alpha enhancer function. Binds DNA in a sequence-specific manner. PIAG antagonizes both Wnt-dependent and Wnt-independent activation by LEF1 (By similarity). Isoform 3 lacks the CTNNB1 interaction domain and may be an antagonist for Wnt signaling. Isoform 5 transcriptionally activates the fibronectin promoter, binds to and represses transcription from the E-cadherin promoter in a CTNNB1- independent manner, and is involved in reducing cellular aggregation and increasing cell migration of pancreatic cancer cells. Isoform 1 transcriptionally activates MYC and CCND1 expression and enhances proliferation of pancreatic tumor cells.

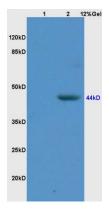
## References

Waterman M.L., et al. Genes Dev. 5:656-669(1991). Hovanes K., et al. Nucleic Acids Res. 28:1994-2003(2000). Jesse S., et al. Int. J. Cancer 126:1109-1120(2010). Kobielak A., et al. Submitted (AUG-2000) to the EMBL/GenBank/DDBJ databases. Ota T., et al. Nat. Genet. 36:40-45(2004).

## **Images**

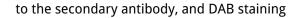


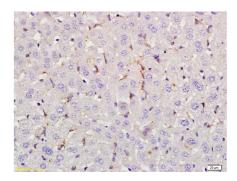
Mouse lymph node lysates probed with Rabbit Anti-LEF-1 Polyclonal Antibody, Unconjugated (AP52338) at 1:300 overnight at 4°C. Followed by conjugation to secondary antibody at 1:500 for 90 min at 37°C.

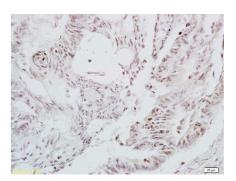


L1 rat brain lysates L2 human colon carcinoma lysates probed with Anti IL-2R gamma/CD132 Polyclonal Antibody, Unconjugated at 1:3000 for 90 min at 37°C. Predicted band 44kD. Observed band size:44kD.

Formalin-fixed and paraffin embedded rat liver tissue labeled with Anti-LEF-1 Polyclonal Antibody, Unconjugated AP52338 at 1:200 followed by conjugation







Formalin-fixed and paraffin embedded human colon carcinoma tissue labeled with Anti-LEF-1 Polyclonal Antibody, Unconjugated AP52338 at 1:200 followed by conjugation to the secondary antibody and DAB staining

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.