

LEF1 antibody - N-terminal region

Rabbit Polyclonal Antibody Catalog # AI16257

Product Information

Application WB Primary Accession O9UJU2

Other Accession <u>NM 016269</u>, <u>NP 057353</u>

ReactivityHuman, Mouse, Rat, Pig, Dog, Guinea Pig, Horse, Bovine **Predicted**Human, Mouse, Rat, Pig, Dog, Guinea Pig, Horse, Bovine

Host Rabbit
Clonality Polyclonal
Calculated MW 44201

Additional Information

Gene ID 51176

Alias Symbol DKFZp586H0919, TCF1ALPHA, LEF-1, TCF10, TCF7L3

Other Names Lymphoid enhancer-binding factor 1, LEF-1, T cell-specific transcription factor

1-alpha, TCF1-alpha, LEF1

Format Liquid. Purified antibody supplied in 1x PBS buffer with 0.09% (w/v) sodium

azide and 2% sucrose.

Reconstitution & Storage Add 50 ul of distilled water. Final anti-LEF1 antibody concentration is 1 mg/ml

in PBS buffer with 2% sucrose. For longer periods of storage, store at 20°C.

Avoid repeat freeze-thaw cycles.

Precautions LEF1 antibody - N-terminal region is for research use only and not for use in

diagnostic or therapeutic procedures.

Protein Information

Name LEF1 (HGNC:6551)

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

(PubMed: 2010090). 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

90 kDa_ 65 kDa_ 40 kDa_ 31 kDa_ 22 kDa_

WB Suggested Anti-LEF1 Antibody Titration: 0.2-1 μg/ml

ELISA Titer: 1:312500

Positive Control: Hela cell lysate

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