

LEF1 Antibody
Purified Mouse Monoclonal Antibody (Mab)
Catalog # AM8648b

Specification

LEF1 Antibody - Product Information

Application	WB,E
Primary Accession	O9UJU2
Reactivity	Human
Host	Mouse
Clonality	monoclonal
Isotype	IgG1, κ
Calculated MW	44201

LEF1 Antibody - Additional Information

Gene ID 51176

Other Names

Lymphoid enhancer-binding factor 1, LEF-1, T cell-specific transcription factor 1-alpha, TCF1-alpha, LEF1

Target/Specificity

This antibody is generated from a mouse immunized with a recombinant protein between 95-283 amino acids from human.

Dilution

WB~~1:4000

Format

Purified monoclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein G column, followed by dialysis against PBS.

Storage

Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

Precautions

LEF1 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

LEF1 Antibody - 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

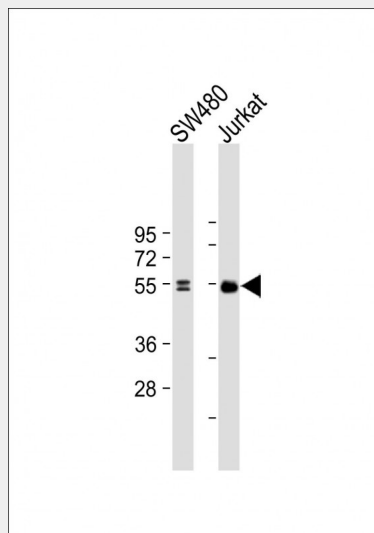
Detected in thymus. Not detected in normal colon, but highly expressed in colon cancer biopsies and colon cancer cell lines. Expressed in several pancreatic tumors and weakly expressed in normal pancreatic tissue. Isoforms 1 and 5 are detected in several pancreatic cell lines.

LEF1 Antibody - Protocols

Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

LEF1 Antibody - Images



All lanes : Anti-LEF1 at dilution Lane 1: SW480 whole cell lysate Lane 2: Jurkat whole cell lysate Lysates/proteins at 20 µg per lane. Secondary Goat Anti-mouse IgG, (H+L), Peroxidase conjugated at 1/10000 dilution. Predicted band size : 44kDa Blocking/Dilution buffer: 5% NFDN/TBST.

LEF1 Antibody - 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.

LEF1 Antibody - 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).
Kobiela A.,et al.Submitted (AUG-2000) to the EMBL/GenBank/DDBJ databases.
Ota T.,et al.Nat. Genet. 36:40-45(2004).