

LEF1 Antibody (Ascites)

Mouse Monoclonal Antibody (Mab) Catalog # AM2181a

Specification

LEF1 Antibody (Ascites) - Product Information

Application	WB,E
Primary Accession	<u>Q9UJU2</u>
Other Accession	<u>Q9QXN1, P27782, NP_057353.1</u>
Reactivity	Human
Predicted	Mouse, Rat
Host	Mouse
Clonality	Monoclonal
Isotype	lgG1
Calculated MW	44201
Antigen Region	10-37

LEF1 Antibody (Ascites) - 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 LEF1 antibody is generated from mice immunized with a KLH conjugated synthetic peptide between 10-37 amino acids from human LEF1.

Dilution WB~~1:500~8000 E~~Use at an assay dependent concentration.

Format

Mouse monoclonal antibody supplied in crude ascites with 0.09% (W/V) sodium azide.

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 (Ascites) is for research use only and not for use in diagnostic or therapeutic procedures.

LEF1 Antibody (Ascites) - Protein Information

Name LEF1 (<u>HGNC:6551</u>)



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:<u>11266540</u>). Regulates T-cell receptor alpha enhancer function (PubMed:<u>19653274</u>). 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.

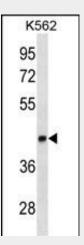
Tissue Location

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 (Ascites) - Protocols

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

- <u>Western Blot</u>
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- <u>Cell Culture</u>
- LEF1 Antibody (Ascites) Images



LEF1 Antibody (Cat. #AM2181a) western blot analysis in K562 cell line lysates (35µg/lane). This demonstrates the LEF1 antibody detected the LEF1 protein (arrow).

LEF1 Antibody (Ascites) - Background



This gene encodes a transcription factor belonging to a family of proteins that share homology with the high mobility group protein-1. The protein encoded by this gene can bind to a functionally important site in the T-cell receptor-alpha enhancer, thereby conferring maximal enhancer activity. This transcription factor is involved in the Wnt signaling pathway, and it may function in hair cell differentiation and follicle morphogenesis. Mutations in this gene have been found in somatic sebaceous tumors. This gene has also been linked to other cancers, including androgen-independent prostate cancer. Alternative splicing results in multiple transcript variants.

LEF1 Antibody (Ascites) - References

Gutierrez, A. Jr., et al. Blood 116(16):2975-2983(2010) Kalsi, G., et al. Hum. Mol. Genet. 19(12):2497-2506(2010) Chen, Q.Y., et al. J. Immunol. 184(9):5047-5054(2010) Beagle, B., et al. PLoS ONE 5 (7), E11821 (2010) : Jugessur, A., et al. PLoS ONE 5 (7), E11493 (2010) :