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Goat Anti-LEF1 Antibody

Peptide-affinity purified goat antibody
Catalog # AF1619a

Specification

Goat Anti-LEF1 Antibody - Product Information

Application	**WB, E**
Primary Accession	Q9UJU2
Other Accession	NP_057353, 51176, 16842 (mouse), 161452 (rat)
Reactivity	**Human, Mouse, Rat**
Predicted	**Dog**
Host	**Goat**
Clonality	**Polyclonal**
Concentration	**100ug/200ul**
Isotype	**IgG**
Calculated MW	**44201**

Goat Anti-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

Dilution
WB~~1:1000
E~~N/A

Format
0.5 mg IgG/ml in Tris saline (20mM Tris pH7.3, 150mM NaCl), 0.02% sodium azide, with 0.5% bovine serum albumin

Storage
Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

Precautions
Goat Anti-LEF1 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

Goat Anti-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.

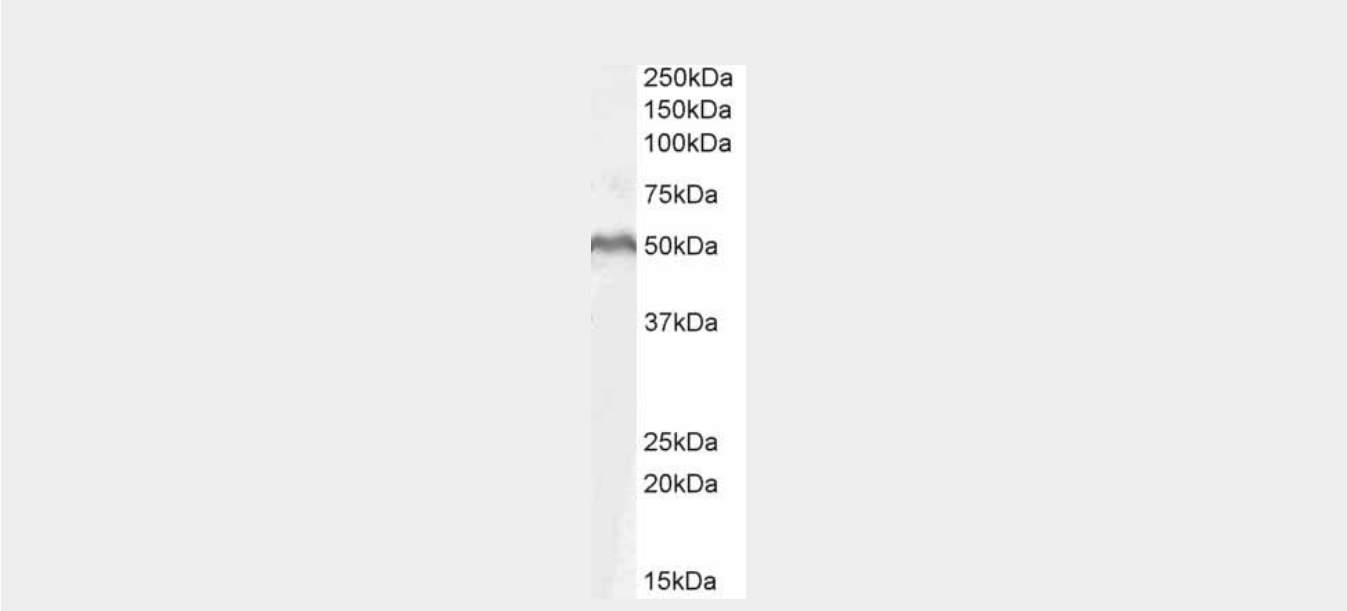
Tissue Location
Detected in thymus. Not detected in normal colon, but highly expressed in colon cancer biopsies and colon cancer cell lines. Expressed in several pancreatic tumors and weakly expressed in normal pancreatic tissue. Isoforms 1 and 5 are detected in several pancreatic cell lines.

Goat Anti-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 Cytomety
- Cell Culture

Goat Anti-LEF1 Antibody - Images



AF1619a (1 µg/ml) staining of MOLT4 lysate (35 µg protein in RIPA buffer). Primary incubation was 1 hour. Detected by chemiluminescence.

Goat Anti-LEF1 Antibody - 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.

Goat Anti-LEF1 Antibody - References

Maternal genes and facial clefts in offspring: a comprehensive search for genetic associations in two population-based cleft studies from Scandinavia. Jugessur A, et al. PLoS One, 2010 Jul 9. PMID 20634891.
Human CD1D gene expression is regulated by LEF-1 through distal promoter regulatory elements. Chen QY, et al. J Immunol, 2010 May 1. PMID 20363964.
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Pathway-based approaches to imaging genetics association studies: Wnt signaling, GSK3beta substrates and major depression. Inkster B, et al. Neuroimage, 2010 Nov 15. PMID 20219685.
Inactivation of LEF1 in T-cell acute lymphoblastic leukemia. Gutierrez A, et al. Blood, 2010 Apr 8. PMID 20124220.