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LEF1 Antibody

Purified Mouse Monoclonal Antibody
Catalog # AO2191a

Product Information

Application	WB, IHC, E
Primary Accession	Q9UJU2
Reactivity	Human
Host	Mouse
Clonality	Monoclonal
Clone Names	3G5F9
Isotype	IgG1
Calculated MW	44201
Description	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.
Immunogen	Purified recombinant fragment of human LEF1 (AA: 33-138) expressed in E. Coli.
Formulation	Purified antibody in PBS with 0.05% sodium azide

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~~1/500 - 1/2000 IHC~~1/200 - 1/1000 E~~1/10000
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	LEF1 Antibody 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.

References

1.Cancer Invest. 2014 Aug;32(7):368-74.2.BMC Gastroenterol. 2012 May 28;12:53.

Images