

Product datasheet for **SC114370**

LEF1 (NM_016269) Human Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	LEF1 (NM_016269) Human Untagged Clone
Tag:	Tag Free
Symbol:	LEF1
Synonyms:	LEF-1; TCF1ALPHA; TCF7L3; TCF10
Mammalian Cell Selection:	None
Vector:	<u>pCMV6-XL4</u>
E. coli Selection:	Ampicillin (100 ug/mL)



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Fully Sequenced ORF:

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>OriGene sequence for NM_016269 edited
GAATTCGGCACCAGGCTGCACGAACCTTCCAACCTCTCCTTTCTCCCCACCCTTGAGT
TACCCCTCTGTCTTTCTGCTGTTGCGCGGGTGTCCACAGCGGAGCGGAGATTACAGA
GCCGCCGGGATGCCCAACTCTCCGGAGGAGGTGGCGCGGGGGGGACCCGGAACCTC
TGCGCCACGGACGAGATGATCCCTTCAAGGACGAGGGCGATCCTCAGAAGGAAAAGATC
TTCCGCCGAGATCAGTATCCCGAAGAGGAAGGCGATTTAGCTGACATCAAGTCTTCTTG
GTGAACGAGTCTGAAATCATCCCGGCCAGCAACGACGACGAGGTGGCCAGACAAGCACA
ACCTCTCAGGAGCCCTACCACGACAAGGCCAGAGAACACCCCGATGACGGAAGCATCCA
GATGGAGGCCTCTACAACAAGGGACCCTCTACTCGAGTTATTCCGGGTACATAATGATG
CCAAATATGAATAACGACCCATACATGTCAAATGGATCTCTTTCTCCACCCATCCCGAGA
ACATCAAATAAAGTGCCCGTGGTGCAGCCATCCCATGCGGTCCATCCTCTCACCCCTC
ATCACTTACAGTGACGAGCACTTTCTCCAGGATCACACCCGTCACACATCCCATCAGAT
GTCAAACCAAACAAGGCATGTCCAGACATCCTCCAGCTCCTGATATCCCTACTTTTAT
CCCTTGCTCCGGGTGGTGTGGACAGATCACCCACCTCTTGGTGGCAAGGTCAGCCT
GTATATCCCATCACGGGTGGATTAGGCAACCCTACCCATCCTCACTGTCACTGACACT
TCCATGTCCAGGTTTTCCCATCATATGATTCCCGGTCTCTCTGGTCCCCACACAACCTGGC
ATCCCTCATCCAGCTATTGTAACACCTCAGGTCAAACAGGAACATCCCCACACTGACAGT
GACCTAATGCACGTGAAGCCTCAGCATGAATAGAGAAAGGAGCAGGAGCCAAAAAGCCT
CACATTAAGAAGCCTCTGAATGCTTTTATGTTATACATGAAAGAAATGAGAGCGAATGTC
GTTGCTGAGTGTACTCTAAAAGAAAGTGCAGCTATCAACCAGATTCTTGGCAGAAGGTGG
CATGCCCTCTCCCGTGAAGAGCAGGCTAAATATTATGAATTAGCACGGAAGAAAGACAG
CTACATATGCAGCTTTATCCAGGCTGGTCTGCAAGAGACAATTATGGTAAGAAAAAGAAG
AGGAAGAGAGAGAAACTACAGGAATCTGCATCAGGTACAGTCCAAGAATGACAGCTGCC
TACATCTGAAACATGGTGGAAAACGAAGCTCATTCCCAATGTGCAAAGCCAAGGCAGCGA
CCCCAGGACCTCTTCTGGAGATGGAAGCTTGTGAAAACCCAGACTGTCTCCACGGCCTG
CCCAGTCGACCCCAAAGGAACACTGACATCAATTTTACCCTGAGGTCACTGCTAGAGACG
CTGATCCATAAAGACAATCACTGCCAACCCCTCTTTCGTCTACTGCAAGAGCCAAGTTCC
AAAATAAAGCATAAAAAGGTTTTTTAAAAGGAAATGAAAAGCACATGAGAATGCTAGCA
GGCTGTGGGCAGCTGAGCAGCTTTTCTCCCCCATATCTGCGTGCACCTCCAGAGCAT
CTTGCATCCAAACCTGTAACTTTTCGGCAAGGACGGTAACTTGGCTGCATTTGCCTGTCA
TGGCCAACTGGAGCCAGCAACCAGCACATCCATCAGCACCCAGTGGAGGAGTTCATGGA
AGAGTTCCCTCTTTGTTTCTGCTTCATTTTTCTTTCTTTTCTTTTCTCTAAAGCTTTTA
TTAACAGTGCAAAGGATCGTTTTTTTTGCTTTTTTAAACTTGAATTTTTTAAATTTA
CACTTTTTAGTTTTAATTTTTCTGTATATTTTGCTAGCTATGAGCTTTTAAATAAAATTG
AAAGTTCTGGAAGTTTGAATAATGACATAAAAAGAAGCCTCTTTTTCTGAGACAGC
TTGTCTGGTAAGTGGCTTCTCTGTGAATTGCCTGTAACACATAGTGGCTTCTCCGCCCTT
GTAAGGTGTTCAGTAGAGCTAAATAATGTAATAGCCAAACCCACTCTGTTGGTAGCAAT
TGGCAGCCCTATTTCAAGTTATTTTTCTTCTGTTTTCTTTTTCTTTTTTAAACAGT
AAACCTTAACAGATGCGTTCAGCAGACTGGTTTGCAGTGAATTTTCAATTTCTTTCTTAT
CACCCCTTGTTGTAAGGCAAGCCAGCACTTGAATTGTTATTACTTTAAATGTTCTGTATT
TGTATCTGTTTTTATTAGCCAATTAGTGGGATTTTATGCCAGTTGTTAAAATGAGCATTG
ATGTACCCATTTTTTAAAAAGCAAGGCACAGCCTTTGCCAAAACCTGTCATCCTAACGT
TTGTCACTCCAGTTTGTGTTAATGTGCTGAGCATTTTTTAAAAGAGCTTTGTAATAAA
ACATTTTTAAAATTAATAAAAAAAAAAAAAAAAAAACTCGAC
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5' Read Nucleotide Sequence:

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>OriGene 5' read for NM_016269 unedited
NGTAACGTCAAATATTTGTATACGACTCACTNATAGGGCGGCCGGAATTCGCACCAGGC
TGCACGAACCCCTTCCAACCTCTCCTTTTCTCCCCACCCTTGAGTTACCCCTCTGTCTTTC
CTGCTGTTGCGCGGGTGTCTCCACAGCGGAGCGGAGATTACAGAGCCGCCGGGATGCCCC
AACTCTCCGGAGGAGGTGGCGCGGGCGGGGGACCCGGAACCTCTGCGCCACGGACGAGA
TGATCCCCTTCAAGGACGAGGGCGATCCTCAGAAGGAAAAGATCTTCGCCGAGATCAGTC
ATCCCCGAAGAGGAAGGCGATTTAGCTGACATCAAGTCTTCCTTGGTGAACGAGTCTGAAA
TCATCCCAGCCAGCAACGACACGAGGTGGCCAGACAAGCACAAACCTCTCAGGAGCCCT
ACCACGACAAGGCCAGAGAACACCCCGATGACGAAAAGCATCCAGATGGAGGCCTCTACA
ACAAGGGACCCTCTACTCGAGTTATTCGCGGTACATAATGATGCCAAATATGAATAACG
ACCCATACATGTCAAATGGATCTCTTTCTCCACCATCCCAGAACATCAAATAAAGTGC
CCGTGGTGACCCATCCCATGCGGTCCATCCTCTACCCCTCATCACTTACAGTGACG
AGCACTTTTCTCCAGGATCACACCCGTACACATCCCATCAGATGTCAACTCCAAACAAG
GCATGTCCAGACATCCTCCAGCTCCTGATATCCCTACTTTTTATCCCTTGTCTCCGGGTG
GTGTTGGACAGATCACCCACCTTTGGCTGGCAAGGTCAGCCTGTATATCCCATCACGG
GGTGGATTCAAGCAACCCTACCCATCCTCACTGTCAAGTCGACACTTCCATGTTCT
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3' Read Nucleotide Sequence:

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>OriGene 3' read for NM_016269 unedited
TGTACCGCGCACGCAATCTAGTGTGCGAGTTTTTTTTTTTTTTTTTTTTAATTTTTAAAAAT
GTTTTATTACAAAGCTTCTTTTAAAAAATGCTCAGCACATTAACCTCAAATGGAATGACA
AACGTTAGGATGACAGTTTTGGCAAAGGCTGTGCCTTGCTTTTTTAAAAAATGGGTACA
TCAATGCTCATTTTAACTGTCATAAAATCCCACTAATTGGCTAATAAAAAACAGATAC
AAATACAGAACATTTAAAGTAATAACAATTCAGTGTGGGCTTTTTACAACAAGGGGT
GATAAGGAAAGAAATGAAAATCACTGCAACCAAGTCTGCTGAACGCATCTGTTAAGGTT
TACTGTTTAAAAAAGAAAAGAAGAAAACAGAAGAAAAATAAAGTAAATAGGGCTGCC
AATTGCTACCAACAGAGTGGGTTTGGCTATTACATTTATTTAGCTCTACTGAACACCTTA
CAAGGGCGGAGAAGCCACTATGTGTTACAGGCAATTCACAGAGAAGCCACTTACCAGACA
AGCTGTCTCAGAAAAAGAAAGCTCTTTTTATGTCAATTTTCAAATTTTCCAGAACTT
TCAATTTTATTTAAAGCTCATAGCTAGCAAAAATACAAGATAATTAACCTAAAAAGT
GTAAATTAATAAATCAAGCTTAAAAAAGCAAAAAAACGATCCTTTTGCACCTGCTAA
ATAAAGCTTTACGAGAAAAGATAAGAAAAGATAAATGAAGCCGAAACCAAGAAGGAACTC
TTCCATGAACTCCTNCACTGGAGTGCTGATGGATGTGCTAGGTGCTGGGCTCCATTGCGC
ATGACAGGCAATGCAGCCAAGTTACCGTCTTGCCGAAGGTTACAAGTTGGATGCANAA
TGCTCCTGGAAGTGCACCCATTATGGGGGAGATAGCTGCTCANCTGCCACAGCCTGCT
GCATTCTCATGGGCTTTAATTNNTCTTTAAAAAACCTTTTATGCTNAT
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Restriction Sites:

NotI-NotI

ACCN:

NM_016269

Insert Size:

2660 bp

OTI Disclaimer: Due to the inherent nature of this plasmid, standard methods to replicate additional amounts of DNA in E. coli are highly likely to result in mutations and/or rearrangements. Therefore, OriGene does not guarantee the capability to replicate this plasmid DNA. Additional amounts of DNA can be purchased from OriGene with batch-specific, full-sequence verification at a reduced cost. Please contact our customer care team at custsupport@origene.com or by calling 301.340.3188 option 3 for pricing and delivery.

The molecular sequence of this clone aligns with the gene accession number as a point of reference only. However, individual transcript sequences of the same gene can differ through naturally occurring variations (e.g. polymorphisms), each with its own valid existence. This clone is substantially in agreement with the reference, but a complete review of all prevailing variants is recommended prior to use. [More info](#)

Components: The ORF clone is ion-exchange column purified and shipped in a 2D barcoded Matrix tube containing 10ug of transfection-ready, dried plasmid DNA (reconstitute with 100 ul of water).

Reconstitution Method:

1. Centrifuge at 5,000xg for 5min.
2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.
3. Close the tube and incubate for 10 minutes at room temperature.
4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom.
5. Store the suspended plasmid at -20°C. The DNA is stable for at least one year from date of shipping when stored at -20°C.

RefSeq: [NM_016269.2](#), [NP_057353.1](#)

RefSeq Size: 3084 bp

RefSeq ORF: 1200 bp

Locus ID: 51176

UniProt ID: [Q9UJU2](#)

Cytogenetics: 4q25

Domains: HMG

Protein Families: Adult stem cells, Druggable Genome, ES Cell Differentiation/IPS, Transcription Factors

Protein Pathways: Acute myeloid leukemia, Adherens junction, Arrhythmogenic right ventricular cardiomyopathy (ARVC), Basal cell carcinoma, Colorectal cancer, Endometrial cancer, Melanogenesis, Pathways in cancer, Prostate cancer, Thyroid cancer, Wnt signaling pathway

Gene Summary:

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. [provided by RefSeq, Oct 2009]

Transcript Variant: This variant (1) represents the longest transcript and encodes the longest isoform (1).