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Product datasheet for SC327870

KLF4 (NM_004235) Human Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	KLF4 (NM_004235) Human Untagged Clone
Tag:	Tag Free
Symbol:	KLF4
Synonyms:	EZF; GKLF
Mammalian Cell Selection:	None
Vector:	pCMV6-XL5
E. coli Selection:	Ampicillin (100 ug/mL)

Fully Sequenced ORF:

>OriGene sequence for NM_004235 edited
ACCAGAGAGAACGAACGTGTCTGCGGGCGCGCGGGGAGCAGAGGCGGTGGCGGGCGGCGG
CGGCACCGGGAGCCGCCGAGTGACCCTCCCCGCCCCTCTGGCCCCCCACCCTCCCACCCG
CCCGTGGCCCGCGCCCATGGCCGCGCGCGCTCCACACAACTCACCGGAGTCCGCGCCYTG
CGCCGCCGACCAGTTCGCAGCTCCGCGCCACGGCAGCCAGTCTCACCTGGCGGCACCGCC
CGCCCACCGCCCCGGCCACAGCCCCTGCGCCCACGGCAGCACTCGAGGCGACCGCGACAG
TGGTGGGGGACGCTGCTGAGTGGAAGAGAGCGCAGCCCGGCCACCGGACCTACTTACTCG
CCTTGCTGATTGTCTATTTTTGCGTTTACAACTTTTCTAAGAACTTTTGTATACAAAGGA
ACTTTTTAAAAAAGACGCTTCCAAGTTATATTTAATCCAAAGAAGAAGGATCTCGGCCAA
TTTGGGGTTTTGGGTTTTGGCTTCGTTTCTTCTCTTCGTTGACTTTGGGGTTCAGGTGCC
CCAGCTGCTTCGGGCTGCCGAGGACCTTCTGGGCCCCCACATTAATGAGGCAGCCACCTG
GCGAGTCTGACATGGCTGTCAGCGACGCGCTGCTCCCATCTTTCTCCACGTTCGCGTCTG
GCCCGGCGGGAAGGGAGAAGACACTGCGTCAAGCAGGTGCCCCGAATAACCGCTGGCGGG
AGGAGCTCTCCCACATGAAGCGACTTCCCCCAGTGCTTCCCGGCCGCCCCTATGACCTGG
CGGCGGCGACCGTGGCCACAGACCTGGAGAGCGGCGGAGCCGGTGCGGCTTGCGGCGGTA
GCAACCTGGCGCCCCTACCTCGGAGAGAGACCGAGGAGTTCAACGATCTCCTGGACCTGG
ACTTTATTCTCTCCAATTCGCTGACCCATCCTCCGGAGTCAGTGGCCGCCACCGTGTCCT
CGTCAGCGTCAGCCTCCTCTTCGTCGTCGCCGTCGAGCAGCGGCCCTGCCAGCGCGCCCT
CCACCTGCAGCTTCACCTATCCGATCCGGGCCGGGAACGACCCGGGCGTGGCGCCGGGCG
GCACGGGCGGAGGCCTCCTCTATGGCAGGGAGTCCGCTCCCCCTCCGACGGCTCCCTTCA
ACCTGGCGGACATCAACGACGTGAGCCCCTCGGGCGGCTTCGTGGCCGAGCTCCTGCGGC
CAGAATTGGACCCGGTGTACATTCCGCCGCAGCAGCCGCAGCCGCCAGGTGGCGGGCTGA
TGGGCAAGTTCGTGCTGAAGGCGTCGCTGAGCGCCCCTGGCAGCGAGTACGGCAGCCCGT
CGGTCATCAGCGTCAGCAAAGGCAGCCCTGACGGCAGCCACCCGGTGGTGGTGGCGCCCT
ACAACGGCGGGCCGCCGCGCACGTGCCCCAAGATCAAGCAGGAGGCGGTCTCTTCGTGCA
CCCACTTGGGCGCTGGACCCCCTCTCAGCAATGGCCACCGGCCGGCTGCACACGACTTCC
CCCTGGGGCGGCAGCTCCCCAGCAGGACTACCCCGACCCTGGGTCTTGAGGAAGTGCTGA
GCAGCAGGGACTGTCACCCTGCCCTGCCGCTTCCTCCCGGCTTCCATCCCCACCCGGGGC
CCAATTACCCATCCTTCCTGCCCGATCAGATGCAGCCGCAAGTCCCGCCGCTCCATTACC
AAGAGCTCATGCCACCCGGTTCCTGCATGCCAGAGGAGCCCAAGCCAAAGAGGGGAAGAC
GATCGTGGCCCCGGAAAAGGACCGCCACCCACACTTGTGATTACGCGGGCTGCGGCAAAA
CCTACACAAAGAGTTCCCATCTCAAGGCACACCTGCGAACCCACACAGGTGAGAAACCTT
ACCACTGTGACTGGGACGGCTGTGGATGGAAATTCGCCCGCTCAGATGAACTGACCAGGC
ACTACCGTAAACACACGGGGCACCGCCCGTTCCAGTGCCAAAAATGCGACCGAGCATTTT
CCAGGTCGGACCACCTCGCCTTACACATGAAGAGGCATTTTTAAATCCCAGACAGTGGAT
ATGACCCACACTGCCAGAAGAGAATTCAGTATTTTTTACTTTTCACACTGTCTTCCCGAT
GAGGGAAGGAGCCCAGCCAGAAAGCACTACAATCATGGTCAAGTTCCCAACTGAGTCATC
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CAATAATTTGTACAATGGTTTATTCCCAAGTATGCCTTAAGCAGAACAAATGTGTTTTTC
TATATAGTTCCTTGCCTTAATAAATATGTAATATAAATTTAAGCAAACGTCTATTTTGTA
TATTTGTAAACTACAAAGTAAAATGAACATTTTGTGGAGTTTGTATTTTGCATACTCAAG
GTGAGAATTAAGTTTTAAATAAACCTATAATATTTTATCTGAAAAAAAAAAAAAAAAAA

5' Read Nucleotide Sequence:

>OriGene 5' read for NM_004235 unedited
TTTTGTAATACGACTCACTATAGGGCGGCCGCGAATTCGGCACGAGGGACCAGNATAGAA
CGAACGTGTCTGCGGGCGCGCGGGGAGCAGAGGCGGTGGCGGGCGGCGGCGGCACCGGGA
GCCGCCGAGTGACCCTCCCCGCCCCTCTGGCCCCCCACCCTCCCACCCGCCCGTGGCCCG
CGCCCATGGCCGCGCGCGCTCCACACAACTCACCGGAGTCCGCGCCCTGCGCCGCCGACC
AGTTCGCAGCTCCGCGCCACGGCAGCCAGTCTCACCTGGCGGCACCGCCCGCCCACCGCC
CCGGCCACAGCCCCTGCGCCCACGGCAGCACTCGAGGCGACCGCGACAGTGGTGGGGGAC
GCTGCTGAGTGGAAGAGAGCGCAGCCCGGCCACCGGACCTACTTACTCGCCTTGCTGATT
GTCTATTTTTGCGTTTACAACTTTTCTAAGAACTTTTGTATACAAAGGAACTTTTTAAAA
AAGACGCTTCCAAGTTATATTTAATCCAAAGAAGAAGGATCTCGGCCAATTTGGGGTTTT
GGGTTTTGGCTTCGCTTCTTCTCTTACTTGACTTTGGGGTTCAAGTGCCCCACCTGCTTC
CGGCTGCCCAGGACCCTTCTGGCCCCCACTTATTGAGGCCTCCCCCTGGCGAGTCTGAAT
TGGCTGCCAGCGACGCACCTGTTCCATATTTCTTCACTTTCGCGTTTGGCCCGCGCGGCA
GGTACAAAACCCTGCGTCATGCCGTGCCCCGAATTACCCCTGGCGGGAGGACCTTCCCCC
ATCGAACCAACTTCCCCAAGGCTTTCCGGCCGCCCCTATACCCTCGCGGGGGCGACCCGC
GGCCCCAACCCTCCAAACCGGTGAGCCCTTTCACCTCTCCGCCCGCACCCC

3' Read Nucleotide Sequence:

>OriGene 3' read for NM_004235 unedited
TCTTGGACGCGGCCGCAATCTAGGATCGAGTTTTTTTTTTTTTTTTTCAGAAAAAATTA
TAGGTTTATTTAAAACTTAATTCTCACCTTGAGTATGCAAAATACAAACTCCACAAAATG
TTCATTTTACTTTGTAGTTTACAAATATACAAAATAGACGTTTGCTTAAATTTATATTAC
ATATTTATTAAGGCAAGGAACTATATAGAAAAACACATTTGTTCTGCTTAAGGCATACTT
GGGAATAAACCATTGTACAAATTATTGCACATCTGAAACCACAGTGCATAACAGACTGTC
TGCATAAAAATGCTAAAGAAGTAAACCAGGTATATTACCTGACTTAGGTCATAAATGTTG
ATCGGAAGACAAATATAGATTTTCCTTGTCAAAGTATGCAGCAGTTTGAAAACTTTGGCT
TCCTTGTTTGGTACCTTTAGAACCAAGACTCACCAAGCACCATCATTTAGGCTATTTAAA
CATGTTTTCTGTACCTGAATTTCTTCCTCTTCTTCTAACATCATAATAATGGCTTTTAGA
AGGTAAAGAGAATACAAGGTGATCTTTTATGCTTATATTGCATCAATACACAATTCAAGG
GAATTCTGGTCTTCCCTCCCCCAACTCACGGATATAATTTATACCCTGATATCCACAACT
TCCAGTCACCCCCTTGGCATTTTGTAAGTCCAGGAATATTCAAGTCGGATTTAGAATTGG
AATGATAGAAGATCCAGTCACAGACCCCCATCTGTTCTTTGGATTTTTGGCTTTTGGATT
CCTCATTTTCCCTGATTATCCACTCCCAAGATGACTCACTTGGGAACTTGACCCTGATTG
TAATGCTTTCTGCCTGGCTCCTCCCTCATCGGAAAACAGGGGGCAAAGGAAAAAACTGAA
TCTCTTCCGGCAGGGGGTCCTACCCCC

Restriction Sites: Please inquire

ACCN: NM_004235

Insert Size: 2903 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
OTI Annotation:	This TrueClone is provided through our Custom Cloning Process that includes sub-cloning into OriGene's pCMV6 vector and full sequencing to provide a non-variant match to the expected reference without frameshifts, and is delivered as lyophilized plasmid DNA.
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_004235.4, NP_004226.3
RefSeq Size:	2903 bp
RefSeq ORF:	2949 bp
Locus ID:	9314
UniProt ID:	O43474
Cytogenetics:	9q31.2
Domains:	zf-C2H2
Protein Families:	Adult stem cells, Embryonic stem cells, ES Cell Differentiation/IPS, Induced pluripotent stem cells, Transcription Factors

Gene Summary: This gene encodes a protein that belongs to the Kruppel family of transcription factors. The encoded zinc finger protein is required for normal development of the barrier function of skin. The encoded protein is thought to control the G1-to-S transition of the cell cycle following DNA damage by mediating the tumor suppressor gene p53. Mice lacking this gene have a normal appearance but lose weight rapidly, and die shortly after birth due to fluid evaporation resulting from compromised epidermal barrier function. Alternative splicing results in multiple transcript variants encoding different isoforms. [provided by RefSeq, Sep 2015]
Transcript Variant: This variant (2) lacks an in-frame segment in the 3' coding region compared to variant 1. The encoded isoform (2) is shorter than isoform 1. Sequence Note: This RefSeq record was created from transcript and genomic sequence data to make the sequence consistent with the reference genome assembly. The genomic coordinates used for the transcript record were based on transcript alignments.