OriGene Technologies, Inc.
9620 Medical Center Drive, Ste 200
Rockville, MD 20850, US
Phone: +1-888-267-4436
https://www.origene.com
techsupport@origene.com
EU: info-de@origene.com
CN: techsupport@origene.cn

Product datasheet for RC216867

ANKLE2 (NM_015114) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	ANKLE2 (NM_015114) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	ANKLE2
Synonyms:	KIAA0692; Lem4; LEMD7; MCPH16
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)

ORF Nucleotide Sequence:

>RC216867 representing NM_015114
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCCGCGATCGCC

ATGCTGTGGCCGCGGCTGGCGGCGGCCGAGTGGGCGGCGCTGGCCTGGGAGCTGCTGGGCGCCTCGGTGC
TGCTGATCGCTGTGCGGTGGCTGGTGCGGCGGCTGGGCCCGCGGCCGGGAGGTCTGGGCCGCAGCGGGAC
CCCAGTTCCTCCGCCAAGCGCGGCCGCCGCCCCCGCCTCAGGTGAAATGACAATGGATGCTCTGTTGGCT
CGATTGAAACTTCTGAATCCAGATGACCTTAGAGAAGAAATCGTCAAAGCCGGATTGAAATGTGGACCCA
TTACATCAACTACAAGGTTCATTTTTGAGAAAAAATTGGCTCAGGCTTTACTGGAGCAAGGAGGAAGGCT
GTCTTCTTTCTACCACCATGAGGCAGGTGTCACAGCTCTCAGCCAGGACCCACAAAGGATTTTGAAGCCA
GCTGAAGGGAACCCAACTGATCAGGCTGGTTTTTCTGAAGACAGAGATTTTGGTTACAGTGTGGGCCTGA
ATCCTCCAGAGGAGGAAGCTGTGACATCCAAGACCTGCTCGGTGCCCCCTAGTGACACCGACACCTACAG
AGCTGGAGCGACTGCGTCTAAGGAGCCGCCCCTGTACTATGGGGTGTGTCCAGTGTATGAGGACGTCCCA
GCGAGAAATGAAAGGATCTATGTTTATGAAAATAAAAAGGAAGCATTGCAAGCTGTCAAGATGATCAAAG
GGTCCCGATTTAAAGCTTTTTCTACCAGAGAAGACGCTGAGAAATTTGCTAGAGGAATTTGTGATTATTT
CCCTTCTCCAAGCAAAACGTCCTTACCACTGTCTCCTGTGAAAACAGCTCCACTCTTTAGCAATGACAGG
TTGAAAGATGGTTTGTGCTTGTCGGAATCAGAAACAGTCAACAAAGAGCGAGCGAACAGTTACAAAAATC
CCCGCACGCAGGACCTCACCGCCAAGCTTCGGAAAGCTGTGGAGAAGGGAGAGGAGGACACCTTTTCTGA
CCTTATCTGGAGCAACCCCCGGTATCTGATAGGCTCAGGAGACAACCCCACTATCGTGCAGGAAGGGTGC
AGGTACAACGTGATGCATGTTGCTGCCAAAGAGAACCAGGCTTCCATCTGCCAGCTGACTCTGGACGTCC
TGGAGAACCCTGACTTCATGAGGCTGATGTACCCTGATGACGACGAGGCCATGCTGCAGAAGCGTATCCG
TTACGTGGTGGACCTGTACCTCAACACCCCCGACAAGATGGGCTATGACACACCGTTGCATTTTGCTTGT
AAGTTTGGAAATGCAGATGTAGTCAACGTGCTTTCGTCACACCATTTGATTGTAAAAAACTCAAGGAATA
AATATGATAAAACACCTGAAGATGTAATTTGTGAAAGAAGCAAAAATAAATCTGTGGAACTGAAGGAGCG
GATCAGAGAGTATTTAAAGGGCCACTACTACGTGCCCCTCCTGAGAGCGGAAGAGACTTCTTCTCCAGTC
ATCGGGGAGCTGTGGTCCCCAGACCAGACGGCTGAGGCCTCTCACGTCAGCCGCTATGGAGGCAGCCCCA
GAGACCCGGTACTGACCCTGAGAGCCTTCGCAGGGCCCCTGAGTCCAGCCAAGGCAGAAGATTTTCGCAA
GCTCTGGAAAACTCCACCTCGAGAGAAAGCAGGCTTCCTTCACCACGTCAAGAAGTCGGACCCGGAAAGA
GGCTTTGAGAGAGTGGGAAGGGAGCTAGCTCATGAGCTGGGGTATCCCTGGGTTGAATACTGGGAATTTC
TGGGCTGTTTTGTTGATCTGTCTTCCCAGGAAGGCCTGCAAAGACTAGAAGAATATCTCACACAGCAGGA
AATAGGCAAAAAGGCTCAACAAGAAACAGGAGAACGGGAAGCCTCCTGCCGAGATAAAGCCACCACGTCT
GGCAGCAATTCCATTTCCGTGAGGGCGTTTCTAGATGAAGATGACATGAGCTTGGAAGAAATAAAAAATC
GGCAAAATGCAGCTCGAAATAACAGCCCGCCCACAGTCGGTGCTTTTGGACATACGAGGTGCAGCGCCTT
CCCCTTGGAGCAGGAGGCAGACCTCATAGAAGCCGCCGAGCCGGGAGGTCCACACAGCAGCAGAAATGGG
CTCTGCCATCCTCTGAATCACAGCAGGACCCTGGCGGGCAAGAGACCAAAGGCCCCCCGTGGGGAGGAAG
CCCATCTGCCACCTGTCTCGGATTTGACTGTTGAGTTTGATAAACTGAATTTGCAAAATATAGGACGTAG
CGTTTCCAAGACACCAGATGAAAGTACAAAAACTAAAGATCAGATCCTGACTTCAAGAATCAATGCAGTA
GAAAGAGACTTGTTAGAGCCTTCTCCCGCAGACCAACTCGGGAATGGCCACAGGAGGACAGAAAGTGAAA
TGTCAGCCAGGATCGCTAAAATGTCCTTGAGTCCCAGCAGCCCCAGGCACGAGGATCAGCTCGAGGTCAC
CAGGGAACCGGCCAGGCGGCTCTTCCTTTTTGGAGAGGAGCCATCAAAACTCGATCAGGATGTTTTGGCC
GCTCTTGAATGTGCAGACGTCGACCCCCATCAGTTCCCGGCCGTGCACAGATGGAAGAGTGCTGTCCTGT
GCTACTCACCCTCGGACAGACAGAGTTGGCCCAGTCCCGCGGTGAAAGGAAGGTTCAAGTCTCAGCTGCC
AGATCTCAGTGGCCCTCACAGCTACAGTCCGGGGAGAAACAGCGTGGCTGGAAGCAACCCCGCAAAGCCA
GGCCTGGGCAGTCCTGGGCGCTACAGCCCCGTGCACGGGAGCCAGCTCCGCAGGATGGCGCGCCTGGCTG
AGCTTGCCGCCCTG

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence:

>RC216867 representing NM_015114
Red=Cloning site Green=Tags(s)

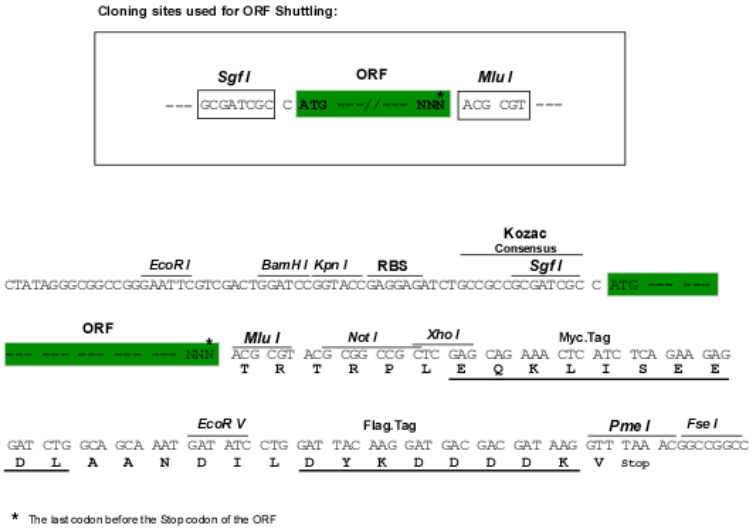
MLWPRLAAAEWAALAWELLGASVLLIAVRWLVRRLGPRPGGLGRSGTPVPPPSAAAAPASGEMTMDALLA
RLKLLNPDDLREEIVKAGLKCGPITSTTRFIFEKKLAQALLEQGGRLSSFYHHEAGVTALSQDPQRILKP
AEGNPTDQAGFSEDRDFGYSVGLNPPEEEAVTSKTCSVPPSDTDTYRAGATASKEPPLYYGVCPVYEDVP
ARNERIYVYENKKEALQAVKMIKGSRFKAFSTREDAEKFARGICDYFPSPSKTSLPLSPVKTAPLFSNDR
LKDGLCLSESETVNKERANSYKNPRTQDLTAKLRKAVEKGEEDTFSDLIWSNPRYLIGSGDNPTIVQEGC
RYNVMHVAAKENQASICQLTLDVLENPDFMRLMYPDDDEAMLQKRIRYVVDLYLNTPDKMGYDTPLHFAC
KFGNADVVNVLSSHHLIVKNSRNKYDKTPEDVICERSKNKSVELKERIREYLKGHYYVPLLRAEETSSPV
IGELWSPDQTAEASHVSRYGGSPRDPVLTLRAFAGPLSPAKAEDFRKLWKTPPREKAGFLHHVKKSDPER
GFERVGRELAHELGYPWVEYWEFLGCFVDLSSQEGLQRLEEYLTQQEIGKKAQQETGEREASCRDKATTS
GSNSISVRAFLDEDDMSLEEIKNRQNAARNNSPPTVGAFGHTRCSAFPLEQEADLIEAAEPGGPHSSRNG
LCHPLNHSRTLAGKRPKAPRGEEAHLPPVSDLTVEFDKLNLQNIGRSVSKTPDESTKTKDQILTSRINAV
ERDLLEPSPADQLGNGHRRTESEMSARIAKMSLSPSSPRHEDQLEVTREPARRLFLFGEEPSKLDQDVLA
ALECADVDPHQFPAVHRWKSAVLCYSPSDRQSWPSPAVKGRFKSQLPDLSGPHSYSPGRNSVAGSNPAKP
GLGSPGRYSPVHGSQLRRMARLAELAAL

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mk8100_d04.zip

Restriction Sites: SgfI-MluI

Cloning Scheme:

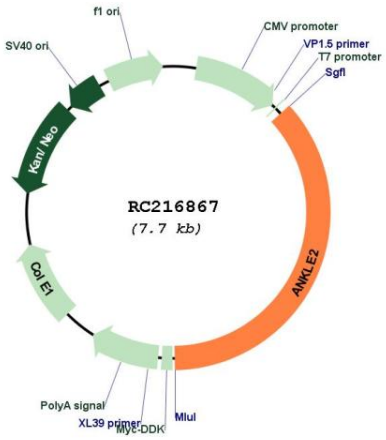


ACCN: NM_015114

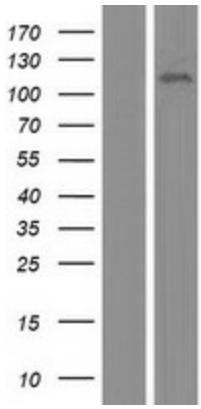
ORF Size: 2814 bp

OTI Disclaimer:	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 clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene.
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.
Note:	Plasmids are not sterile. For experiments where strict sterility is required, filtration with 0.22um filter is required.
RefSeq:	NM_015114.3
RefSeq Size:	4491 bp
RefSeq ORF:	2817 bp
Locus ID:	23141
UniProt ID:	Q86XL3
Cytogenetics:	12q24.33
Protein Families:	Transmembrane
MW:	104.1 kDa
Gene Summary:	This gene encodes a member of the LEM family of inner nuclear membrane proteins. The encoded protein functions as a mitotic regulator through postmitotic formation of the nuclear envelope. Mutations in this gene cause morphology defects in the nuclear envelope and BAF hyperphosphorylation. [provided by RefSeq, Mar 2014]

Product images:



Circular map for RC216867



Western blot validation of overexpression lysate (Cat# [LY414777]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from un-transfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC216867 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).