

Product datasheet for RC222866

LAP2 (TMPO) (NM_001032284) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	LAP2 (TMPO) (NM_001032284) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	LAP2
Synonyms:	CMD1T; LAP2; LEMD4; PRO0868; TP
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>RC222866 representing NM_001032284 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGCCGGAGTTCCTGGAAGACCCCTCGGTCTGACAAAAGACAAGTTGAAGAGTGAGTTGGTCGCCAACA
ATGTGACGCTGCCGGCCGGGAGCAGCGCAAAGACGTGTACGTCCAGCTCTACCTGCAGCACCTCACGGC
TCGCAACCGGCCCGCTCCCCGCCGACCAACAGCAAGGGCCCCGGACTTCTCCAGTGACGAAGAG
CGCGAGCCACCCCGGTCTCGGCTCTGGGCGCCCGCCGGGCGGAGCCGAGCAGCCGTCGGCAGGA
AAGCCACAAAAAACTGATAAACCCAGACAAGAAGATAAAGATGATCTAGATGTAACAGAGCTCACTAA
TGAAGATCTTTGGATCAGCTTGTGAAATACGGAGTGAATCCTGGTCTATTGTGGGAACAACAGGAAG
CTATATGAGAAAAAGCTTTTGAACCTGAGGGAACAAGGAACAGAATCAAGATCTTCTACTCTCTGCCAA
CAATTTCTTCTCAGCAGAAAAACAAGGCAGAATGGAAGTAATGATTCTGACAGATACAGTGACAATGA
AGAAGACTCTAAAATAGAGCTCAAGCTTGAGAAGAGAGAACCCTAAAGGGCAGAGCAAAGACTCCAGTA
ACACTCAAGCAAAGAAGAGTTGAGCACAATCAGGTGGGAGAAAAACAGAGGAAAGAAGAGTAGAAAAGG
ATATTCTAAGGAAATGTTCCCTATGAAGCATCTACCAACAGGAATTAGTGCTAGTTGCCGAGACC
AATCAAAGGGCTGCAGGCCGCCATTAGAACTCAGTGATTTAGGATGGAGGAGTCTTTTTCATCTAAA
TATGTTCTAAGTATGTTCCCTTGGCAGATGTCAAGTCAGAAAAGACAAAAAGGGACGCTCCATTCCCC
TATGGATAAAAAATTTGCTGTTTGTGTTGGCAGTTTTTTTGTGTTTGGTCTATCAAGCTATGAAAAC
CAACCAAGTAAATCCCTTCTAATTTTCTTATGTTGACCCTAGAAAATCCAAC

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA



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Protein Sequence: >RC222866 representing NM_001032284
 Red=Cloning site Green=Tags(s)

MPEFLEDPSVLTKDKLKSELVANNVTLPAGEQRKDVYVQLYLQHLTARNRPPLPAGTNSKGPPDFSSDEE
 REPTPVLGSGAAAAGRRAAVGRKATKKTDKPRQEDKDDL DVTEL TNEDLLDQLVKYGVNPGPIVGTTRK
 LYEKLLKLREQGTE SRSS TPLPTISSSAENTRQNGSNDSDRYSDNEEDSKIELKLEKREPLKGRAKTPV
 TLKQRRVEHNQVGEKTEERRRVERDILKEMFPYEASTPTGISASCRRP IKGAAGRPLELSDFRMEESFSSK
 YVPKYVPLADV KSEKTKGRSIPVWIKILLFVVAVFLFLVYQAMETNQVNPFSNFLHVDPKRSN

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mk8053_f07.zip

Restriction Sites: SgfI-MluI

Cloning Scheme:

Cloning sites used for ORF Shuttling:



* The last codon before the Stop codon of the ORF

ACCN: NM_001032284

ORF Size: 1035 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.

RefSeq: [NM_001032284.3](#)

RefSeq Size: 2374 bp

RefSeq ORF: 1038 bp

Locus ID: 7112

UniProt ID: [P42167](#)

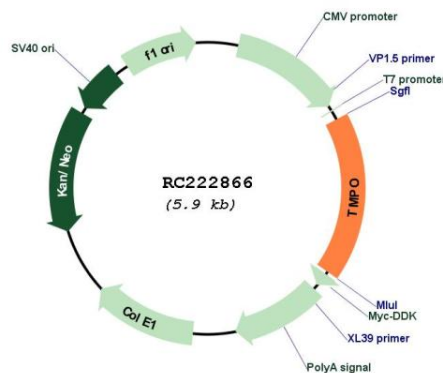
Cytogenetics: 12q23.1

Protein Families: Stem cell - Pluripotency, Transmembrane

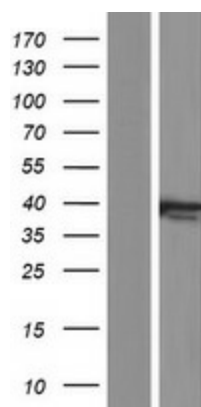
MW: 38.6 kDa

Gene Summary: Through alternative splicing, this gene encodes several distinct LEM domain containing protein isoforms. LEM domain proteins include inner nuclear membrane and intranuclear proteins, and are involved in a variety of cellular functions including gene expression, chromatin organization, and replication and cell cycle control. The encoded alpha isoform is broadly diffuse in the nucleus and contains a lamin binding domain, while the beta and gamma isoforms are localized to the nuclear membrane and contain an HDAC3 interaction domain. The distinct isoforms may compete with each other when acting to chaperone other proteins and regulate transcription. [provided by RefSeq, Aug 2019]

Product images:



Circular map for RC222866



Western blot validation of overexpression lysate (Cat# [LY422296]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC222866 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).