

## Product datasheet for SC302623

### LAP2 (TMPO) (NM\_001032283) Human Untagged Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	LAP2 (TMPO) (NM_001032283) Human Untagged Clone
Tag:	Tag Free
Symbol:	LAP2
Synonyms:	CMD1T; LAP2; LEMD4; PRO0868; TP
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
Fully Sequenced ORF:	>SC302623 representing NM_001032283. Blue=Insert sequence Red=Cloning site Green=Tag(s)

GCTCGTTTAGTGAACCGTCAGAATTTTGAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTG  
 GATCCGGTACCGAGGAGATCTGCCGCC**CGGATCGCC**  
 ATGCCGGAGTTCTGGAAGACCCCTCGGTCTGACAAAAGACAAGTTGAAGAGTGAGTTGGTCGCCAAC  
 AATGTGACGCTGCCGGCCGGGAGCAGCGCAAAGACGTGTACGTCCAGCTCTACCTGCAGCACCTCACG  
 GCTCGCAACCGGCCGCCGCTCCCGCCGGCACCAACAGCAAGGGGCCCGGACTTCTCCAGTGACGAA  
 GAGCGCGAGCCACCCCGGTCTCGGCTCTGGGGCCGCCGCCGGGGCCGAGCCGAGCAGCCGTCGGC  
 AGGAAAGCCACAAAAAACTGATAAACCCAGACAAGAAGATAAAGATGATCTAGATGTAACAGAGCTC  
 ACTAATGAAGATCTTTTGATCAGCTTGTGAAATACGGAGTGAATCCTGGTCCTATTGTGGGAACAACC  
 AGGAAGCTATATGAGAAAAGCTTTTGAACTGAGGGAACAAGGAACAGAATCAAGATCTTCTACTCCT  
 CTGCCAACATTTCTTCTCAGCAGAAAAATACAAGGCAGAATGGAAGTAATGATTCTGACAGATACAGT  
 GACAATGAAGAAGACTCTAAAATAGAGCTCAAGCTTGAGAAGAGAGAACCCTAAAGGGCAGAGCAAAG  
 ACTCCAGTAACACTCAAGCAAAGAAGAGTTGAGCACAATCAGAGCTATTCTCAAGCTGGAATAACTGAG  
 ACTGAATGGACAAGTGGATCTTCAAAGGCGGACCTCTGCAGGCATTAAGTAGGGAATCTACAAGAGGG  
 TCAAGAAGAACTCCAAGGAAAAGGGTGGAACCTCAGAACATTTTCGTATAGATGGTCCAGTAATTTCA  
 GAGAGTACTCCCATAGCTGAACTATAATGGCTTCAAGCAACGAATCCTTAGTTGTCAATAGGGTGACT  
 GGAAATTTCAAGCATGCATCTCTATTCTGCCAATCACTGAATTCTCAGACATACCCAGAAGAGCACCA  
 AAGAAACCATTGACAAGAGCTGAAGTGGGAGAAAAAACAGAGGAAAGAAGAGTAGAAAGGGATATTCTT  
 AAGGAAATGTTCCCTATGAAGCATCTACACCAACAGGAATTAGTGCTAGTTGCCGAGACCAATCAAA  
 GGGGCTGCAGGCCGCCATTAGAACTCAGTGATTTAGGATGGAGGAGTCTTTTTCATCTAAATATGTT  
 CCTAAGTATGTTCCCTTGGCAGATGTCAAGTCAGAAAAGACAAAAAGGGACGCTCCATTCCCGTATGG  
 ATAAAAATTTGCTGTTTGTGTTGTGGCAGTTTTTTTGTGTTTGGTCTATCAAGCTATGAAACCAAC  
 CAAGTAAATCCCTTCTCTAATTTCTTCATGTTGACCTAGAAAAATCCAAC**TGA**  
**ACGCGT**ACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGAT  
 TACAAGGATGACGACGATAAGGTTTAAACGGCCGGC


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<b>Restriction Sites:</b>	Sgfl-Mlul
<b>ACCN:</b>	NM_001032283
<b>Insert Size:</b>	1365 bp
<b>OTI Disclaimer:</b>	<p>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 <a href="mailto:custsupport@origene.com">custsupport@origene.com</a> or by calling 301.340.3188 option 3 for pricing and delivery.</p> <p>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. <a href="#">More info</a></p>
<b>OTI Annotation:</b>	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.
<b>Components:</b>	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).
<b>Reconstitution Method:</b>	<ol style="list-style-type: none"> <li>1. Centrifuge at 5,000xg for 5min.</li> <li>2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.</li> <li>3. Close the tube and incubate for 10 minutes at room temperature.</li> <li>4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom.</li> <li>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.</li> </ol>
<b>RefSeq:</b>	<a href="#">NM_001032283.2</a>
<b>RefSeq Size:</b>	4186 bp
<b>RefSeq ORF:</b>	1365 bp
<b>Locus ID:</b>	7112
<b>UniProt ID:</b>	<a href="#">P42167</a>
<b>Cytogenetics:</b>	12q23.1
<b>Protein Families:</b>	Stem cell - Pluripotency, Transmembrane
<b>MW:</b>	50.7 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]

Transcript Variant: This variant (2) differs at the 3' end compared to variant 1, resulting in a shorter isoform (beta) with a distinct C-terminus compared to isoform alpha.