

## Product datasheet for **SC324748**

### LMO2 (NM\_001142316) Human Untagged Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	LMO2 (NM_001142316) Human Untagged Clone
Tag:	Tag Free
Symbol:	LMO2
Synonyms:	LMO-2; RBTN2; RBTNL1; RHOM2; TTG2
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
Fully Sequenced ORF:	>SC324748 representing NM_001142316. Blue=Insert sequence Red=Cloning site Green=Tag(s)

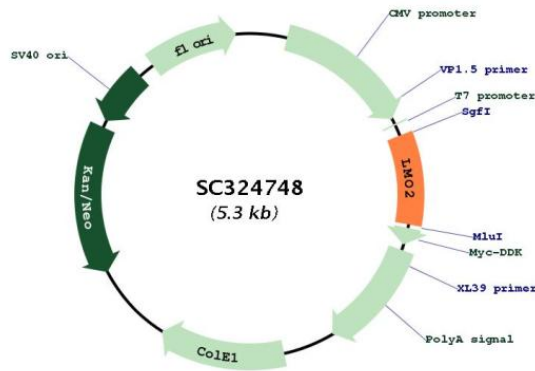
```
GCTCGTTTAGTGAACCGTCAGAATTTGTAAACGACTCACTATAGGGCGCCGGGAATTCGTCGACTG
GATCCGGTACCGAGGAGATCTGCCGCCCGGATCGCC
ATGTCCTCGGCCATCGAAAGGAAGAGCCTGGACCCTTCAGAGGAACCAAGTGGATGAGGTGCTGCAGATC
CCCCATCCCTGCTGACATGCGGCGGCTGCCAGCAGAACATTGGGGACCGCTACTTCCTGAAGGCCATC
GACCAGTACTGGCAGGAGGACTGCCTGAGCTGCGACCTCTGTGGCTGCCGGCTGGGTGAGGTGGGGCGG
CGCCTCTACTACAACTGGGCCGGAAGCTCTGCCGGAGAGACTATCTCAGGCTTTTGGCAAGACGGT
CTCTGCGCATCCTGTGACAAGCGGATTCGTGCCTATGAGATGACAATGCGGGTGAAGACAAAGTGAT
CACCTGGAATGTTCAAATGCGCCGCTGTGAGAAGCATTCTGTGTAGGTGACAGATACCTCCTCATC
AACTCTGACATAGTGTGCGAACAGGACATCTACGAGTGGACTAAGATCAATGGGATGATATAG
ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGAT
TACAAGGATGACGACGATAAGGTTAAACGGCCGGC
```

Restriction Sites: Sgfl-MluI



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Plasmid Map:



<b>ACCN:</b>	NM_001142316
<b>Insert Size:</b>	477 bp
<b>OTI Disclaimer:</b>	Our molecular clone sequence data has been matched to the reference identifier above as a point of reference. Note that the complete sequence of our molecular clones may differ from the sequence published for this corresponding reference, e.g., by representing an alternative RNA splicing form or single nucleotide polymorphism (SNP).
<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).

**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\\_001142316.1](#)

**RefSeq Size:** 1705 bp

**RefSeq ORF:** 477 bp

**Locus ID:** 4005

**UniProt ID:** [P25791](#)

**Cytogenetics:** 11p13

**Protein Families:** Druggable Genome

**MW:** 18.4 kDa

**Gene Summary:** LMO2 encodes a cysteine-rich, two LIM-domain protein that is required for yolk sac erythropoiesis. The LMO2 protein has a central and crucial role in hematopoietic development and is highly conserved. The LMO2 transcription start site is located approximately 25 kb downstream from the 11p13 T-cell translocation cluster (11p13 ttc), where a number T-cell acute lymphoblastic leukemia-specific translocations occur. Alternative splicing results in multiple transcript variants encoding different isoforms.[provided by RefSeq, Nov 2008]

Transcript Variant: This variant (3) differs in the 5' UTR and has an additional segment downstream of the 5' coding region, compared to variant 1. These differences cause translation initiation at a downstream in-frame ATG and an isoform (2) with a shorter N-terminus, compared to isoform 1. Variants 2 and 3 encode the same isoform (2).