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 RC226864

LMO2 (NM_001142316) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	LMO2 (NM_001142316) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	LMO2
Synonyms:	LMO-2; RBTN2; RBTNL1; RHOM2; TTG2
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)

ORF Nucleotide Sequence:

```
>RC226864 representing NM_001142316
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCCGCGATCGCC

ATGTCCTCGGCCATCGAAAGGAAGAGCCTGGACCCTTCAGAGGAACCAGTGGATGAGGTGCTGCAGATCC
CCCCATCCCTGCTGACATGCGGCGGCTGCCAGCAGAACATTGGGGACCGCTACTTCCTGAAGGCCATCGA
CCAGTACTGGCACGAGGACTGCCTGAGCTGCGACCTCTGTGGCTGCCGGCTGGGTGAGGTGGGGCGGCGC
CTCTACTACAAACTGGGCCGGAAGCTCTGCCGGAGAGACTATCTCAGGCTTTTTGGGCAAGACGGTCTCT
GCGCATCCTGTGACAAGCGGATTCGTGCCTATGAGATGACAATGCGGGTGAAAGACAAAGTGTATCACCT
GGAATGTTTCAAGTGCGCCGCCTGTCAGAAGCATTTCTGTGTAGGTGACAGATACCTCCTCATCAACTCT
GACATAGTGTGCGAACAGGACATCTACGAGTGGACTAAGATCAATGGGATGATA

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA
```

Protein Sequence:

```
>RC226864 representing NM_001142316
Red=Cloning site Green=Tags(s)

MSSAIERKSLDPSEEPVDEVLQIPPSLLTCGGCQQNIGDRYFLKAIDQYWHEDCLSCDLCGCRLGEVGRR
LYYKLGRKLCRRDYLRLFGQDGLCASCDKRIRAYEMTMRVKDKVYHLECFKCAACQKHFCVGDRYLLINS
DIVCEQDIYEWTKINGMI

TRTRPLEQKLISEEDLAANDILDYKDDDDKV
```

Chromatograms: https://cdn.origene.com/chromatograms/mg2975_d01.zip

View online »

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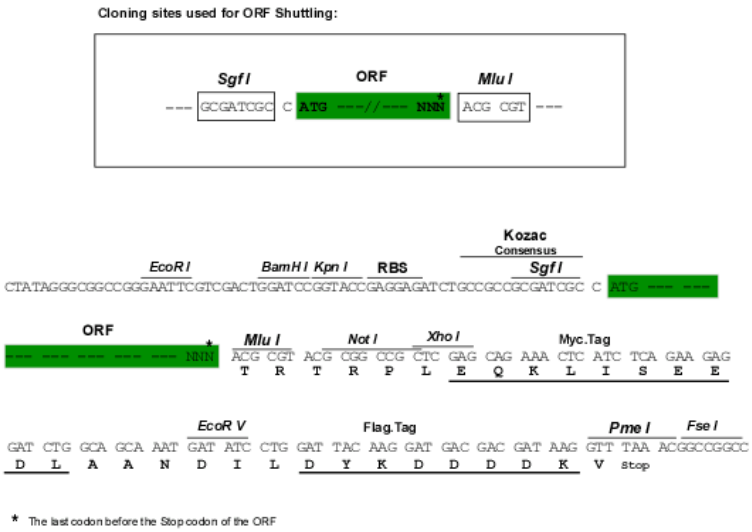
Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_001142316

ORF Size: 474 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_001142316.1, NP_001135788.1

RefSeq ORF: 477 bp

Locus ID: 4005

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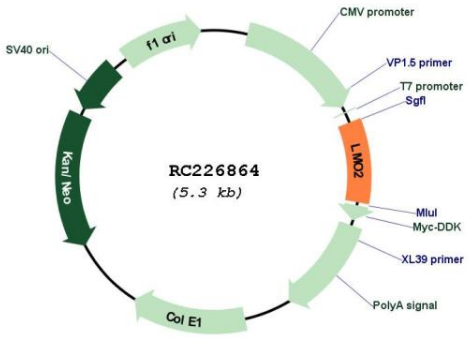
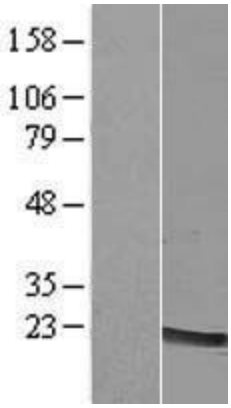
UniProt ID:	P25791
Cytogenetics:	11p13
Protein Families:	Druggable Genome
MW:	18.2 kDa
Gene Summary:	LMO2 encodes a cysteine-rich, two LIM-domain protein that is required for yolk sac erythropoiesis. The LMO2 protein has a central and crucial role in hematopoietic development and is highly conserved. 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]

Product images:



Circular map for RC226864



Western blot validation of overexpression lysate (Cat# [LY428034]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from un-transfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC226864 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).

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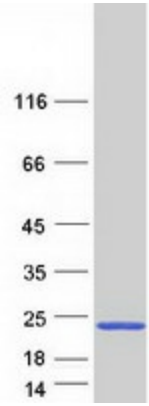

Coomassie blue staining of purified LMO2 protein (Cat# [TP326864]). The protein was produced from HEK293T cells transfected with LMO2 cDNA clone (Cat# RC226864) using MegaTran 2.0 (Cat# [TT210002]).

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