

Product datasheet for RC229124

LMO2 (NM_005574) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	LMO2 (NM_005574) 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:	>RC229124 representing NM_005574 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGGAAGGGAGCGCGGTGACTGTCCTTGAGCGCGGAGGGGCGAGCTCGCCGGCGGAGCGCCGGAGCAAGC
GGAGGCGCAGGAGCGCGGCGACGGCGGGCGGGCGGGCGCCCGAGCACCCGAGGGGGTCCGAGCCCC
GGCAGCCGGCCAGCCCCGCGCCACAAAGGGAGCGCCCCCGCCCGGCACCCCGCCTCCCTCCCCAATG
TCCTCGGCCATCGAAAGGAAGAGCCTGGACCTTCAGAGGAACCAAGTGGATGAGGTGCTGCAGATCCCC
CATCCCTGCTGACATGCGGCGGCTGCCAGCAGAACATTGGGGACCGCTACTTCCTGAAGGCCATCGACCA
GTACTGGCAGGAGACTGCCTGAGCTGCGACCTCTGTGGCTGCCGGCTGGGTGAGGTGGGCGGGCGCCTC
TACTACAAACTGGGCCGGAAGCTCTGCCGAGAGACTATCTCAGGCTTTTGGGCAAGACGGTCTCTGCG
CATCCTGTGACAAGCGGATTCGTGCCTATGAGATGACAATGCGGGTAAAAGACAAAGTGTATCACCTGGA
ATGTTTCAAATGCGCCGCTGTGAGAAGCATTCTGTGTAGGTGACAGATACCTCCTCATCAACTCTGAC
ATAGTGTGCGAACAGGACATCTACGAGTGGACTAAGATCAATGGGATGATA

ACGCGTACGCGGGCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA



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Protein Sequence: >RC229124 representing NM_005574
Red=Cloning site Green=Tags(s)

MEGSAVTVLERGGASSPAERRSKRRRRSSGGGGGGGARAPGVRAPAAGQPRATKGAPPPPGTPPPSPM
 SSAIERKSLDPSEEPVDEVLQIPPSLLTCGGCQQNIQDRYFLKAIQYWHEDCLSCDLGCRLEGEVGRRL
 YYKLGRKLCRRDYLRFLFGQDGLCASCDKRIRAYEMTMRVKDKVYHLECFKCAACQKHFVCGDRYLLINSD
 IVCEQDIYEWTKINGMI

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Restriction Sites: SgfI-MluI

Cloning Scheme:

Cloning sites used for ORF Shuttling:



* The last codon before the Stop codon of the ORF

ACCN: NM_005574

ORF Size: 681 bp

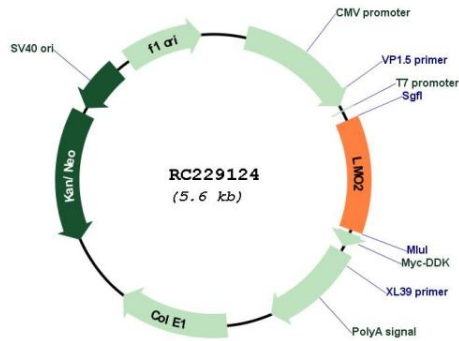
OTI Disclaimer: Due to the inherent nature of this plasmid, standard methods to replicate additional amounts of DNA in E. coli are highly likely to result in mutations and/or rearrangements. Therefore, OriGene does not guarantee the capability to replicate this plasmid DNA. Additional amounts of DNA can be purchased from OriGene with batch-specific, full-sequence verification at a reduced cost. Please contact our customer care team at custsupport@origene.com or by calling 301.340.3188 option 3 for pricing and delivery.

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](#)

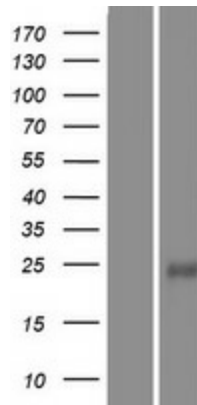
OTI Annotation: This clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene.

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:	<ol style="list-style-type: none">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:	<u>NM_005574.4</u>
RefSeq ORF:	684 bp
Locus ID:	4005
UniProt ID:	<u>P25791</u>
Cytogenetics:	11p13
Domains:	LIM
Protein Families:	Druggable Genome
MW:	24.9 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]

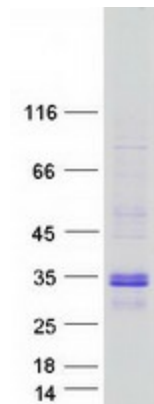
Product images:



Circular map for RC229124



Western blot validation of overexpression lysate (Cat# [LY432149]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC229124 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified LMO2 protein (Cat# [TP329124]). The protein was produced from HEK293T cells transfected with LMO2 cDNA clone (Cat# RC229124) using MegaTran 2.0 (Cat# [TT210002]).