

Product datasheet for **RG226864**

LMO2 (NM_001142316) Human Tagged ORF Clone

Product data:

Product Type: Expression Plasmids
Product Name: LMO2 (NM_001142316) Human Tagged ORF Clone
Tag: TurboGFP
Symbol: LMO2
Synonyms: LMO-2; RBTN2; RBTN1; RHOM2; TTG2
Mammalian Cell Selection: Neomycin
Vector: pCMV6-AC-GFP (PS100010)
E. coli Selection: Ampicillin (100 ug/mL)
ORF Nucleotide Sequence: >RG226864 representing NM_001142316
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGTCCTCGGCCATCGAAAGGAAGAGCCTGGACCCTTCAGAGGAACCAAGTGGATGAGGTGCTGCAGATCC
CCCCATCCTGCTGACATGCGCGGCTGCCAGCAGAACATTGGGGACCGCTACTTCTGAAGCCATCGA
CCAGTACTGGCACGAGGACTGCCTGAGCTGCGACCTCTGTGGCTGCCGGCTGGGTGAGGTGGGGCGGCGC
CTCTACTACAACTGGGCCGGAAGCTCTGCCGGAGAGACTATCTCAGGCTTTTGGCAAGACGGTCTCT
GCGCATCTGTGACAAGCGGATTCGTGCCTATGAGATGACAATGCGGGTAAAAGACAAAGTGTATCACCT
GGAATGTTTCAAGTGCGCCGCTGTGAGAAGCATTCTGTGTAGGTGACAGATACCTCCTCATCAACTCT
GACATAGTGTGCGAACAGGACATCTACGAGTGGACTAAGATCAATGGGATGATA

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

Protein Sequence: >RG226864 representing NM_001142316
Red=Cloning site Green=Tags(s)
MSSAIERKSLDPSEEPVDEVLQIPPSLLTCGGCQNIQDRYFLKAIDQYWHEDCLSCDLGCRLGEVGRR
L YYKLGRKLCRRDYLRFLFGQDGLCASCDKRIRAYEMTMRVKDKVYHLECFKCAACQKHFVCGDRYLLINS
DIVCEQDIYEWTKINGMI

TRTRPLE - GFP Tag - V

Restriction Sites: Sgfl-MluI

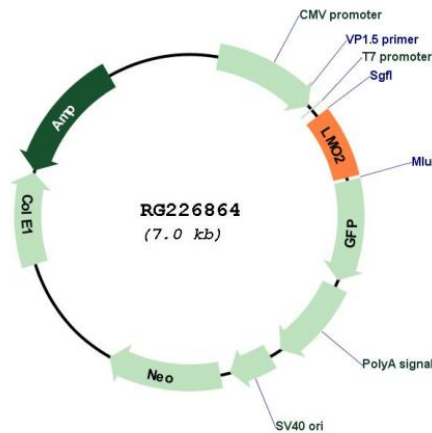


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Cloning Scheme:



Plasmid Map:



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:	<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_001142316.1, NP_001135788.1</u>
RefSeq Size:	1705 bp
RefSeq ORF:	477 bp
Locus ID:	4005
UniProt ID:	<u>P25791</u>
Cytogenetics:	11p13
Protein Families:	Druggable Genome
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]