

Product datasheet for MR222894

Lyar (NM_025281) Mouse Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Lyar (NM_025281) Mouse Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Lyar
Synonyms:	MLZ-264
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>MR222894 ORF sequence Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGGTATTTTTACATGCAATGCATGTGGTGAATCCGTGAAGAAAATACAAGTGGAAAAGCATGTGTCTA
ACTGCAGAACTGTGAATGTCTTTCCTGCATTGACTGTGGGAAAGATTTCTGGGGTATGACTACAAAAG
CCATGTGAAGTGCATCAGTGAAGTGCAGAAAGTACGGAGGCAAAGGCTATGAAGCCAAGACACACAAAGGT
GATGCAAAACAGCAGGCATGGATTACAGAAAATTAATGAGTTAATAAGAAAACCAACGTCAGCCCCAAGG
TGCAGAACTTTTGCAGCAAATCAGTGTCTTTGATAATGTTCCAGAAAAAGGGCAAGTTTCAGAACTG
GATGAAAAACAGCCTGAAAGTGCACAGCGACTCCGTTCTAGAGCAGGTGTGGGATATCTTCTCCGAAGCA
TCCAGCAGTGAGCAAGATCAGCAGCAGCCACCCAGCCACACGGCCAAGCCACATGCAGAGATGCCGATCA
CTAAAGTTCATCTGCAAAAACAATGGCACCACAGAAGAGCAAACCGAGGCGAAGAAGAATAAAAGAGA
AAGGAAGGAGGAACGGCAGAAAAACAGGAAGAAAGAGAAGAAAGAGCTGAAGCTAGAAAACCAACAGGAA
AACCTGAGGGGCCAGAAGCCAAAGCGCAAGAAGAACCAGGAGGCCGGACATGAGGCTGCTGGGGAGG
AGGCCCGCAGGCCAGCGGCCACCGGAGAAGAAGAAAGCCAGGGAGGACAGGCTTCTGAAGAGGGAGC
AGACAGAAATGGGGCCCTGGGGAGGATGCTGCCGAGGGCAGACCAAGACAGCAGCAGGGAAACCGAAG
CGGCCAAAGCACTCAGGAGCTGAGTCTGGTTACAAGAAAAAAGATGAAGTTACCAGAGCAGCCTGAAG
AGGGAGAGGCCAAGGACCACGAGGCTCCATCGAAAGTAAATTCAACTGGAAGGGGACCATTAAGGCTGT
TTTGAAACAGGCTCCAGACAACGAGATATCAGTCAAGAAGTTAAAGAAAAAGTTATAGCTCAGTACCAT
GCGGTGATGAACGACCATCACACATCGGAGGAGGAGCTCCTGGCCATCTTCAACAGGAAGATCAGCAGGA
ACCCACCTTTAAGGTGCTGAAGGACAGAGTAAAGCTTCTGAAG

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCTGGATT
ACAAGGATGACGACGATAAGGTTTAA



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Protein Sequence: >MR222894 protein sequence
 Red=Cloning site Green=Tags(s)

MVFFTCNACGESVKKIQVEKHVSNCRNCECLSCIDCGKDFWGDDYKSHVKCISEGQKYGGKGYEAKTHKG
 DAKOQAWIQKINELIKKPNVSPKVRELLQQISAFDNVPRKKAKFQNMKNLSLVHSDSVLEQVWDFSEA
 SSSEQDQQPPSHTAKPHAEMPI TKVPSAKTNGTTEEQTEAKKNKRERKEERQKNRKKKEKELKLENHQE
 NLRGQPKPKRKNQEAGHEAAGEEAAEASGPPEKKKAQGGQASEEGADRNGGPGEDAAEQTKTAAGKRK
 RPKHSGAESGYKKKMKLPEQPEEGEAKDHEAPSKGKFNWGTIKAVLKQAPDNEISVKKLKKKVIQYH
 AVMNDHHTSEEELLAIFNRKISRNP TFKVLKDRVKLLK

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_025281

ORF Size: 1167 bp

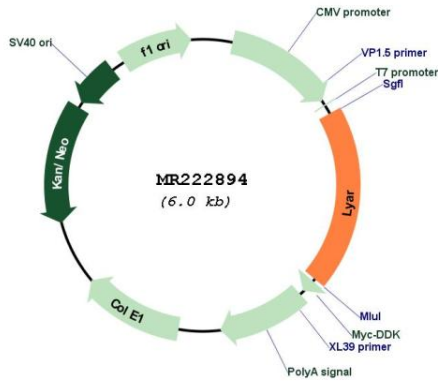
OTI Disclaimer: The molecular sequence of this clone aligns with the gene accession number as a point of reference only. However, individual transcript sequences of the same gene can differ through naturally occurring variations (e.g. polymorphisms), each with its own valid existence. This clone is substantially 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_025281.3, NP_079557.2</u>
RefSeq Size:	1568 bp
RefSeq ORF:	1167 bp
Locus ID:	17089
UniProt ID:	<u>Q08288</u>
Cytogenetics:	5 20.29 cM
MW:	43.7 kDa
Gene Summary:	Plays a role in the maintenance of the appropriate processing of 47S/45S pre-rRNA to 32S/30S pre-rRNAs and their subsequent processing to produce 18S and 28S rRNAs (By similarity). Also acts at the level of transcription regulation. Along with PRMT5, binds embryonic globin promoter (By similarity). Represses the expression of embryonic globin Hbb-y gene (PubMed:25092918). In neuroblastoma cells, may also repress the expression of oxidative stress genes, including CHAC1, HMOX1, SLC7A11, ULBP1 and that encoding the small nucleolar RNA SNORD41 (By similarity). Preferentially binds to a DNA motif containing 5'-GGTTAT-3' (By similarity). Stimulates phagocytosis of photoreceptor outer segments by retinal pigment epithelial cells (PubMed:25735755). Prevents NCL self-cleavage, maintaining a normal steady-state level of NCL protein in undifferentiated embryonic stem cells (ESCs), which in turn is essential for ESC self-renewal (PubMed:19489080).[UniProtKB/Swiss-Prot Function]

Product images:



Circular map for MR222894