

Product datasheet for RC226844

LYAR (NM_001145725) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	LYAR (NM_001145725) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	LYAR
Synonyms:	ZC2HC2; ZLYAR
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>RC226844 ORF sequence Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGGTATTTTTACATGCAATGCATGTGGTGAATCAGTGAAGAAAATACAAGTGGAAAAGCATGTGTCTG
TTTGCAGAACTGTGAATGCCTTTCTTGCATTGACTGCGGTAAAGATTTCTGGGGCGATGACTATAAAAA
CCACGTGAAATGCATAAGTGAAGATCAGAAGTATGGTGGCAAAGGCTATGAAGGTAACCCACAAAGGC
GACATCAAAACAGCAGGCGTGGATTAGAAAATTAGTGAATTAATAAGAGACCCAATGTCAGCCCCAAAG
TGAGAGAACTTTAGAGCAAATTAGTGCTTTTGACAACGTTCCAGGAAAAGGCAAAATTCAGAAATTG
GATGAAGAACAGTTTAAAGTTCATAATGAATCCATTCTGGACCAGGTGTGGAATATCTTTCTGAAGCT
TCCAACAGCGAACCAAGTCAATAAGGAACAGGATCAACGGCCACTCCACCCAGTGGCAATCCACATGCAG
AAATCTCCACCAAGGTTCCAGCCTCAAAGTGAAGACGCGCTGGAACAGCAAGGGGAGGTGAAGAAGAA
TAAAGAGAAAAGAAAGGAAGAACGGCAGAGAAAAGGAAAAGAGAAAAGAAAGAACTAAAGTTAGAAAAC
CACCAGGAAAACCAAGGAATCAGAAGCCTAAGAAGCGCAAAAAGGGACAGGAGGCTGACCTTGAGGCTG
GTGGGGAGGAAGTCCCTGAGGCCAATGGCTCTGCAGGGAAGAGGAGCAAGAAGAAGAAGCAGCGCAAGGA
CAGCGCCAGTGAAGAAAGGCACGCGTGGGCGCAGGGAAGAGGAAGCGGAGGCACTCGGAAGTTGAAACA
GATTCTAAGAAGAAAAGATGAAGCTCCAGAGCATCTGAGGGCGGAGAACAGAAAGCATGAGGCTC
CTGCAAAAAGGTAAATCAACTGGAAGGAACTATTAAGCAATTCTGAAACAGGCCCCAGACAATGAAAT
AACCATCAAAAAGCTAAGGAAAAGGTTTTAGCTCAGTACTACACAGTGACAGATGAGCATCACAGATCC
GAAGAGGAACTCCTGGTCATCTTTAACAAAGAAAATCAGCAAGAACCCTACCTTTAAGTTATTAAGGACA
AAGTCAAGCTTGTGAAA

AG**CGGACCG**ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCC
TGGATTACAAGGATGACGACGATAAGGTTTAA



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Protein Sequence: >RC226844 protein sequence
Red=Cloning site Green=Tags(s)

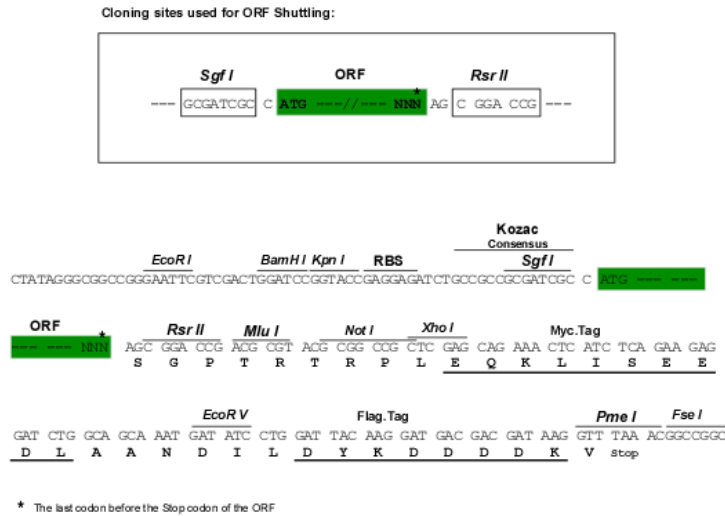
MVFFTCNACGESVKKIQVEKHVSVCRNCECLSCIDCGKDFWGDDYKNHVKCI SEDQKYGGKGYEGKTHKG
 DIKQQAWIQKISELIKRPNVSPKVRELEQISAFDNVPRKKAKFQNMKNLSKVHNESILDQVWNIFSEA
 SNSEPVNKEQDQRPLHPVANPHAEISTKVPASKVKDAVEQQGEVKKNKRRERKEERQKRRKREKELKLEN
 HQENSRNQKPKKRKKGQEADLEAGGEEVPEANGSAGKRSKKKKQRKDSASEEEARVGAGKRKRHSEVET
 DSKKKKMKLPEHPEGPEDEAPAKGKFNWKGTIKAILKQAPDNEITIKKLRKKVLAQYYTVTDEHHS
 EEELLVIFNKKISKNPFTKLLKDKVKLVK

SGPTRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mk6618_h06.zip

Restriction Sites: SgfI-RsrII

Cloning Scheme:



ACCN: NM_001145725

ORF Size: 1137 bp

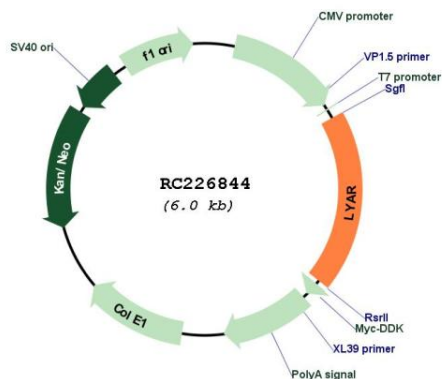
OTI Disclaimer: The molecular sequence of this clone aligns with the gene accession number as a point of reference only. However, individual transcript sequences of the same gene can differ through naturally occurring variations (e.g. polymorphisms), each with its own valid existence. This clone is substantially 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.

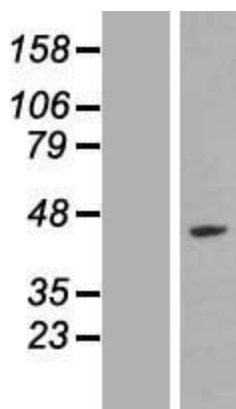
Components: The ORF clone is ion-exchange column purified and shipped in a 2D barcoded Matrix tube containing 10ug of transfection-ready, dried plasmid DNA (reconstitute with 100 ul of water).

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_001145725.1, NP_001139197.1</u>
RefSeq Size:	1486 bp
RefSeq ORF:	1140 bp
Locus ID:	55646
UniProt ID:	<u>Q9NX58</u>
Cytogenetics:	4p16.3
MW:	43.6 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 (PubMed:24495227). Also acts at the level of transcription regulation. Along with PRMT5, binds the gamma-globin (HBG1/HBG2) promoter and represses its expression (PubMed:25092918). In neuroblastoma cells, may also repress the expression of oxidative stress genes, including CHAC1, HMOX1, SLC7A11, ULBP1 and SNORD41 that encodes a small nucleolar RNA (PubMed:28686580). Preferentially binds to a DNA motif containing 5'-GGTTAT-3' (PubMed:25092918). Stimulates phagocytosis of photoreceptor outer segments by retinal pigment epithelial cells (By similarity). Prevents nucleolin/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 (By similarity).[UniProtKB/Swiss-Prot Function]

Product images:



Circular map for RC226844



Western blot validation of overexpression lysate (Cat# [LY428988]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC226844 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).