

Product datasheet for **RG226844**

LYAR (NM_001145725) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	LYAR (NM_001145725) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	LYAR
Synonyms:	ZC2HC2; ZLYAR
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)
ORF Nucleotide Sequence:	>RG226844 representing NM_001145725 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGGTATTTTTACATGCAATGCATGTGGTGAATCAGTGAAGAAAATACAAGTGGAAAAGCATGTGTCTG
TTTGCAGAACTGTGAATGCCTTTCTTGCATTGACTGCGGTAAGATTTCTGGGGCGATGACTATAAAAA
CCACGTGAAATGCATAAGTGAAGATCAGAAGTATGGTGGCAAAGGCTATGAAGGTAACCCACAAAGGC
GACATCAAACAGCAGGCGTGGATTCAGAAAATTAGTGAATTAATAAGAGACCCAATGTCAGCCCCAAAG
TGAGAGAACTTTAGAGCAAATTAGTGCTTTTGACAACGTTCCCAGGAAAAGGCAAAATTCAGAATTG
GATGAAGAACAGTTTAAAGTTCATAATGAATCCATTCTGGACCAGGTGTGGAATATCTTTCTGAAGCT
TCCAACAGCGAACCAAGTCAATAAGGAACAGGATCAACGGCCACTCCACCCAGTGGCAATCCACATGCAG
AAATCTCCACCAAGGTTCCAGCCTCAAAGTGAAGACGCGCTGGAACAGCAAGGGGAGGTGAAGAAGAA
TAAAGAGAAAAGAAAGGAAGAACGGCAGAAAGAAAAGGAAAAGAGAAAAGAAAGAACTAAAGTTAGAAAAC
CACCAGGAAAACCAAGGAATCAGAAGCCTAAGAAGCGCAAAAAGGGACAGGAGGCTGACCTTGAGGCTG
GTGGGAGGAAGTCCCTGAGGCAATGGCTCTGCAGGGAAGAGGAGCAAGAAGAAGAAGCAGCGCAAGGA
CAGCGCCAGTGAAGAAAGGCACGCGTGGGCGCAGGGAAGAGGAAGCGGAGGCACTCGGAAGTTGAAACA
GATTCTAAGAAGAAAAGATGAAGCTCCAGAGCATCTGAGGGCGGAGAACAGAAAGCATGAGGCTC
CTGCAAAAAGGTAATCAACTGGAAGGAACTATTAAGCAATTCTGAAACAGGCCCCAGACAATGAAAT
AACCATCAAAAAGCTAAGGAAAAGGTTTTAGCTCAGTACTACACAGTGACAGATGAGCATCACAGATCC
GAAGAGGAACTCTGGTCATCTTTAACAAAGAAAATCAGCAAGAACCCTACCTTTAAGTTATTAAGGACA
AAGTCAAGCTTGTGAAA

AGCGGACCGACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA



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Protein Sequence: >RG226844 representing NM_001145725
 Red=Cloning site Green=Tags(s)

MVFFTCNACGESVKKIQVEKHVSVCRNCECLSCIDCGKDFWGDDYKNHVKCI SEDQKYGGKGYEGKTHKG
 DIKQQAWIQKISELIKRPNVSPKVRELEQISAFDNVPRKKAKFQNMKNLSLVHNESILDQVWNIFSEA
 SNSEPVNKEQDQRPLHPVANPHAEISTKVPASKVKDAVEQQGEVKKNKRRERKEERQKKRREKELKLEN
 HQENSRNQPKPKRKKGGQEAADLEAGGEEVPEANGSAGKRSKKKKQQRKDSASEEEARVAGKRKRHRHSEVET
 DSKKKKMKLPEHPEGPEDEAPAKGKFNWKGTIKAILKQAPDNEITIKKLRKKVLAQYYTVTDEHHR
 EEELLVIFNKKISKNPFTKLLKDKVKLVK

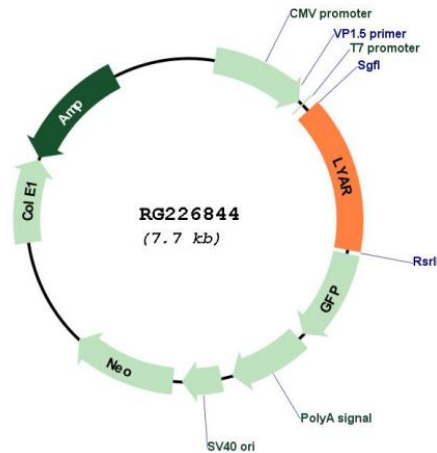
SGPTRRRLE - GFP Tag - V

Restriction Sites: SgfI-RsrII

Cloning Scheme:



Plasmid Map:



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:	NM_001145725.1 , NP_001139197.1
RefSeq Size:	1486 bp
RefSeq ORF:	1140 bp
Locus ID:	55646
UniProt ID:	Q9NX58
Cytogenetics:	4p16.3
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]