

## Product datasheet for **MG202195**

### Lin7b (NM\_011698) Mouse Tagged ORF Clone

#### Product data:

**Product Type:** Expression Plasmids  
**Product Name:** Lin7b (NM\_011698) Mouse Tagged ORF Clone  
**Tag:** TurboGFP  
**Symbol:** Lin7b  
**Synonyms:** LIN-7B; MALS-2; Veli2  
**Mammalian Cell Selection:** Neomycin  
**Vector:** pCMV6-AC-GFP (PS100010)  
**E. coli Selection:** Ampicillin (100 ug/mL)  
**ORF Nucleotide Sequence:** >MG202195 representing NM\_011698  
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCC**CGATCGCC**

ATGGCTGCACTGGTGGAGCCGCTGGGGCTGGAGCGGGACGTGTCCCGGGCTGTGGAGCTGCTGGAGCGGC  
 TGCAGCGCAGCGGAGAGCTGCCCGCAGAAAGCTGCAGGCCCTGCAGCGGGTCTGCAGAGTCGTTCTG  
 CTCCGCCATCCGCGAGGTGTATGAACAGCTCTATGACACGCTGGACATCACTGGCAGCGCCGAGGTGCGG  
 GCTCATGCCACAGCTAAGGCCACAGTGGCTGCTTTCACGGCCAGTGAGGGCCACGCACATCCAGGGTGC  
 TGGAACTACCGAAGACTGATGAGGGTTTGGGCTTCAACATCATGGGTGGCAAGGAGCAGAACTACCCAT  
 CTATATCTCTCGAGTCATCCCTGGGGCGTGGCTGATCGCCATGGTGGCCCAAGAGGGGAGACCAGCTG  
 CTGTCTGTGAATGGTGTGAGTGTGGAAGGCGAACACCATGAAAAGGCGGTGGAATCCTGAAGGCTGCAC  
 AGGGCTCAGTAAACTGGTGGTGCCTACACTCCTCGGGTGTGGAGGAGATGGAAGCCCGCTTCGAGAA  
 GATGCGATCTGCCGTCGGCGCCAGCAGCACCACAGCTACACGTCTTGGAGTCTCGAGGC

**ACGCGT**ACGCGGCCGCTCGAG - GFP Tag - GTTTAA

**Protein Sequence:** >MG202195 representing NM\_011698  
 Red=Cloning site Green=Tags(s)

MAALVEPLGLERDVSRVAVELLERLQRSGELPPQKLQALQRLVQSRFCSAIREVYEQLYDTLDITGSAEVR  
 AHATAKATVAAF TASEGHAHPRVVELPKTDEGLGFNIMGGKEQNSPIYISRVIPGGVADRHGGLKRGDQL  
 LSVNGVSVEGEHHEKAVELLKAAQGSVKLVVRYTPRVLEEMEARFEKMRSARRRQHHHSYTSLESRG

**TRTRPLE** - GFP Tag - V

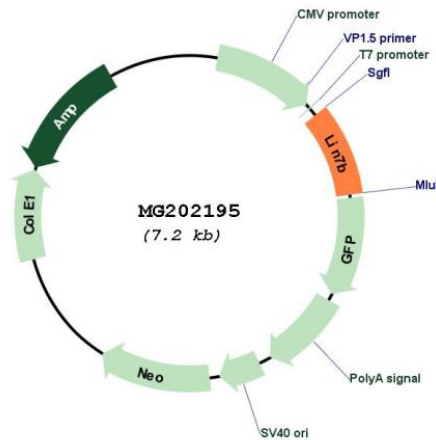
**Restriction Sites:** SgfI-MluI



Cloning Scheme:



Plasmid Map:



ACCN: NM\_011698

ORF Size: 621 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:**

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\\_011698.1](#), [NP\\_035828.1](#)

**RefSeq Size:** 746 bp

**RefSeq ORF:** 624 bp

**Locus ID:** 22342

**UniProt ID:** [O88951](#)

**Cytogenetics:** 7 B3

**Gene Summary:** Plays a role in establishing and maintaining the asymmetric distribution of channels and receptors at the plasma membrane of polarized cells. Forms membrane-associated multiprotein complexes that may regulate delivery and recycling of proteins to the correct membrane domains. The tripartite complex composed of LIN7 (LIN7A, LIN7B or LIN7C), CASK and APBA1 may have the potential to couple synaptic vesicle exocytosis to cell adhesion in brain. Ensures the proper localization of GRIN2B (subunit 2B of the NMDA receptor) to neuronal postsynaptic density and may function in localizing synaptic vesicles at synapses where it is recruited by beta-catenin and cadherin. Required to localize Kir2 channels, GABA transporter (SLC6A12) and EGFR/ERBB1, ERBB2, ERBB3 and ERBB4 to the basolateral membrane of epithelial cells. May increase the amplitude of ASIC3 acid-evoked currents by stabilizing the channel at the cell surface.[UniProtKB/Swiss-Prot Function]