

Product datasheet for RC205598

LIN7 (LIN7B) (NM_022165) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	LIN7 (LIN7B) (NM_022165) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	LIN7
Synonyms:	LIN-7B; MALS-2; MALS2; VELI2
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>RC205598 ORF sequence Red=Cloning site Blue=ORF Green=Tags(s)

TTTGTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCCGCGATCGCC

ATGGCTGCGCTGGTGGAGCCGCTGGGGCTGGAGCGGGACGTGTCCCGGGCGGTTGAGCTCCTCGAGCGGC
 TCCAGCGCAGCGGGGAGCTGCCGCCGAGAAGCTGCAGGCCCTCCAGCGAGTTCTGCAGAGCCGCTTCTG
 CTCCGCTATCCGAGAGGTGTATGAGCAGCTTTATGACACGCTGGACATCACCGGCAGCGCCGAGATCCGA
 GCCCATGCCACAGCCAAGGCCACAGTGGCTGCCTTACAGCCAGCGAGGGCCACGCACATCCAGGGTAG
 TGGAGCTACCCAAGACGGATGAGGGCCTAGGCTTCAACATCATGGGTGGCAAAGAGCAAACTCGCCCAT
 CTACATCTCCCGGTTCATCCAGGGGTGTGGCTGACCGCCATGGAGGCCTCAAGCGTGGGGATCAACTG
 TTGTCGGTGAACGGTGTGAGCGTTGAGGGTGAAGCATGAGAAGGCGGTGGAGCTGCTGAAGGCGGCC
 AGGGCTCGGTGAAGCTGGTTGTCCGTTACACACCGCGAGTGTGGAGGAGATGGAGGCCCGTTTCAGAA
 GATGCGCTCTGCCCGCCGCGCCAACAGCATCAGAGCTACTCGTCCTTGGAGTCTCGAGGT

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence:	>RC205598 protein sequence Red=Cloning site Green=Tags(s)
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MAALVEPLGLERDVSRVALLERLQRSGELPPQKLQALQRLQSRFCSAIREVYEQLYDTLDITGSAEIR
 AHATAKATVAFTAEGHAHPRVVELPKTDEGLGFNIMGGKEQNSPIYISRVIPGGVADRHGGLKRGDQL
 LSVNGVSVEGEQHEKAVELLKAAQGSVKLVVRYTPRVLEEMEARFEKMRSARRRQQHQSYSSLESRG

TRTRPLEQKLISEEDLAANDILDYKDDDDKV


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Chromatograms: https://cdn.origene.com/chromatograms/mk6316_d12.zip

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_022165

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.

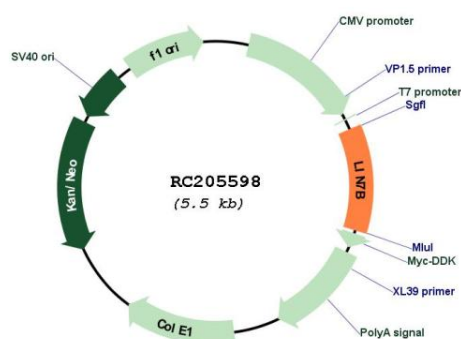
Note: Plasmids are not sterile. For experiments where strict sterility is required, filtration with 0.22um filter is required.

RefSeq: [NM_022165.3](#)

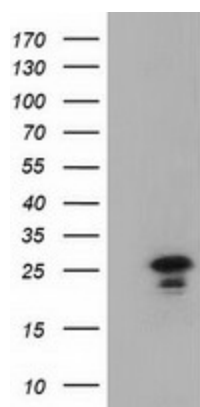
RefSeq Size: 755 bp

RefSeq ORF:	624 bp
Locus ID:	64130
UniProt ID:	Q9HAP6
Cytogenetics:	19q13.33
Protein Families:	Druggable Genome
MW:	22.9 kDa
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 (By similarity).[UniProtKB/Swiss-Prot Function]

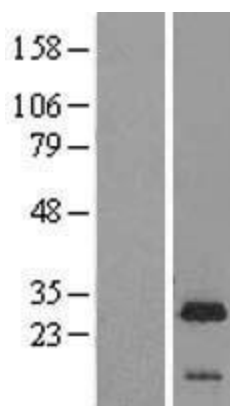
Product images:



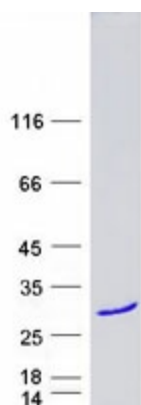
Circular map for RC205598



HEK293T cells were transfected with the pCMV6-ENTRY control (Cat# [PS100001], Left lane) or pCMV6-ENTRY LIN7B (Cat# RC205598, Right lane) cDNA for 48 hrs and lysed. Equivalent amounts of cell lysates (5 ug per lane) were separated by SDS-PAGE and immunoblotted with anti-LIN7B (Cat# [TA501516]). Positive lysates [LY411720] (100ug) and [LC411720] (20ug) can be purchased separately from OriGene.



Western blot validation of overexpression lysate (Cat# [LY411720]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC205598 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified LIN7B protein (Cat# [TP305598]). The protein was produced from HEK293T cells transfected with LIN7B cDNA clone (Cat# RC205598) using MegaTran 2.0 (Cat# [TT210002]).