

Product datasheet for **MG225677**

Lin28b (NM_001031772) Mouse Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Tag:	TurboGFP
Symbol:	Lin28b
Synonyms:	2810403D23Rik; D030047M17Rik; Lin-28.2
Mammalian Cell	Neomycin
Selection:	
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)

ORF Nucleotide Sequence: >MG225677 representing NM_001031772
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTACTATAGGGCGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCCGCGATCGCC

ATGCCGAAGCGGGCAAGCAAAGGTGAAGAGCCAGAAAACTGCCCGGGCTGGCAGAGGACGAACCC
AGGTTCTGCATGGCACTGGCCACTGTAATGGTTCAACGTGCGCATGGGATTCGGATTCATCTCCATGAT
AAGTCGAGAGGAAATCCCTTGGATATCCAGTGGATGATTTGTACACCAAAGCAAATTCATGGAA
GGATTTAGAAGCTTGAAGAAGGAGAGCCAGTGAATTTACATTTAAAAATCCCCAAAGGCCTTGAGT
CAATACGGTAAACAGGCCAGGTGGGAGCCCTGCTTAGGAAGTAAAGAAGACCTAAAGGGAAAGCCCT
GCAAAAGAGAAAGCAAAGGGAGATAGGTGGAGACGGCAGGATTTACTGATGGATCAGATGTGGACTGTG
CGAGAAGAAGAGTCCAGGATGATCCAAGATGCTACAAGTGTGGTGGTCTCGACCATCATGCTAAAGAAT
GCAGTCTACCTCCTCAGCCAAAGAAGTCCATTACTGTCAGAGCATCATGCACATGGTGGCCAACTGCC
ACACAAGCTTGCCGCTCAGCTGCCCGCCAGTTCTCAGGGAAGACAGGAGGAGCAATCCAGCCATGCAGC
TCTGCGGCACCAAGAGAAGTGGGAGGGGGCATGGCTGCACAGTACTGTTTCCTCAGGAGGTGAAGTCAG
AAATGGCAGAGCACTCAGACAGGTCACCCCAAGAAGTTTCTCCACGAAAGCGTTTGCAGCAATAGGAGA
GCAAAACAAAAGGGCCCTTTGATTCAGAAACGGAAAAAGACT

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA



Protein Sequence: >MG225677 representing NM_001031772
 Red=Cloning site Green=Tags(s)

MAEGGASKGEEPEKLPGLAEDEPQVLHGTGHCKWFNVRMGFGFISMISREGNPLDIPVDVVFVHQSKLFME
 GFRSLKEGEPVEFTFKKSPKGLSIRVTGPGGSPCLGSERRPKGKTLQKRKPKGDRWRRQDLLMDQMWTV
 REEESRMIPRCYNCGLDHHAKCECLPPQPKKCHYCQSIMHMVANCPHKLAAQLPASSQGRQEAESQPCS
 SAAPREVGGHGCTVLPQEVKSEMAEHSRSPQEVSSTKAFAAIGEONKKGPLIQKRKKT

TRTRPLE - GFP Tag - V

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_001031772

ORF Size: 813 bp

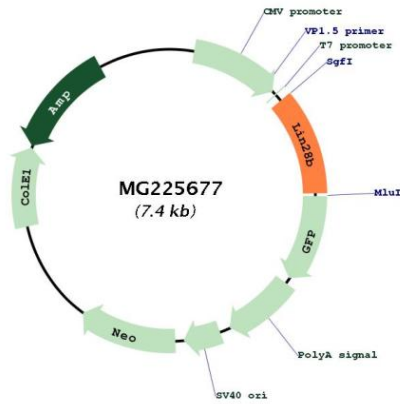
OTI Disclaimer: The molecular sequence of this clone aligns with the gene accession number as a point of reference only. However, individual transcript sequences of the same gene can differ through naturally occurring variations (e.g. polymorphisms), each with its own valid existence. This clone is substantially 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.
Note:	Plasmids are not sterile. For experiments where strict sterility is required, filtration with 0.22um filter is required.
RefSeq:	<u>NM_001031772.2, NP_001026942.1</u>
RefSeq Size:	5420 bp
RefSeq ORF:	816 bp
Locus ID:	380669
UniProt ID:	<u>Q45KJ6</u>
Cytogenetics:	10 B2
Gene Summary:	Suppressor of microRNA (miRNA) biogenesis, including that of let-7 and possibly of miR107, miR-143 and miR-200c. Binds primary let-7 transcripts (pri-let-7), including pri-let-7g and pri-let-7a-1, and sequester them in the nucleolus, away from the microprocessor complex, hence preventing their processing into mature miRNA. Does not act on pri-miR21. The repression of let-7 expression is required for normal development and contributes to maintain the pluripotent state of embryonic stem cells by preventing let-7-mediated differentiation. When overexpressed, recruits ZCCHC11/TUT4 uridylyltransferase to pre-let-7 transcripts, leading to their terminal uridylation and degradation. This activity might not be relevant in vivo, as LIN28B-mediated inhibition of let-7 miRNA maturation appears to be ZCCHC11-independent. Interaction with target pre-miRNAs occurs via an 5'-GGAG-3' motif in the pre-miRNA terminal loop (By similarity). Mediates MYC-induced let-7 repression (PubMed:19211792). When overexpressed, may stimulate growth of carcinoma cell lines (By similarity).[UniProtKB/Swiss-Prot Function]

Product images:



Circular map for MG225677