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Product datasheet for MG207572

Unc84b (BC098208) Mouse Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Unc84b (BC098208) Mouse Tagged ORF Clone
Tag:	TurboGFP
Symbol:	Unc84b
Synonyms:	SUN2, C030011B15
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)

ORF Nucleotide Sequence:

>MG207572 representing BC098208
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCCGCGATCGCC

ATGTCGAGACGAAGCCAGCGCCTCACTCGCTACTCTCAGGATGATAACGATGGCGGCAGCAGCAGCAGTG
GTGCGAGCTCCGTGGCAGGAAGCCAGGGCACCGTGTTTAAAGACAGTCCTCTCAGGACTTTGAAGAGGAA
ATCCAGCAACATGAAGCACCTGTCCCCAGCTCCACAGCTGGGCCCCTCCTCTGACTCCCACACCTCCTAC
TACAGCGAGTCTGTGGTTCGAGAGTCCTACATCGGCAGCCCCCGGGCTGTGTCCCTCGCCAGGAGTGCCC
TCCTGGATGACCACCTACACAGTGAGCCCTACTGGAGCGGGGACCTTCGGGGGAGGAGGAGGAGAGGAAC
AGGTGGTTCTGAGAGCAGCAAGGCCAATGGGCTCACCGCGGAGAGCAAGGCCTCAGAAGACTTTTTCGGA
TCTTCCTCAGGCTATTCTTCAGAGGATGACCTTGCAGGCTACACGGACTCAGACCAGCACAGCTCGGGGT
CCAGGTTAAGGAGTGCAGCATCTCGGGCCGGCTCCTTTGTCTGGACTCTGGTCACTTTTCCAGGCCGCCT
CTTTGGTCTTCTCTACTGGTGGATTGGCACCACCTGGTACCGCCTGACAACTGCTGCCTCCCTCCTGGAT
GTCTTCGTCCTAACCAGGCACTTCTCGCTGAACCTGAAGAGTTTTCTGTGGTTCCTTCTGCTCTTGCTAC
TCCTGACTGGTCTGACCTACGGTGCTTGGCATTTTTACCCCTTAGGGCTGCAGACATTGCAACCCGCTGT
GGTCTCCTGGTGGGCAGCAAAAGAGAGCAGGAAGCAGCCAGAGGTGTGGGAATCCAGAGACGCCTCCCAG
CACTTCCAGGCTGAGCAGCGCGTTCTCTCCCGGGTTCACTCTCTGGAGCGGCGTCTGGAAGCCCTTGCTG
CAGACTTTTCCTCCAACTGGCAGAAGGAGGCCATACGGCTGGAACGCCTGGAGCTGCGGCAGGGGGCTGC
TGGCCATGGAGGAGGCAGTAGCCTGAGCCATGAAGATGCCCTGTCTCTCCTAGAAGGGTTGGTGAGCCGC
CGCGAGGCTACCCTGAAGGAGGACTTGCGCAGGGACACAGTGGCTCATATCCAGGAAGAATTGGCTACCC
TGAGGGCAGAGCATCACCAAGACTCGGAAGATCTCTTCAAGAAGATCGTCCAGGCCTCTCAGGAGTCCGA
AGCCCGAGTCCAGCAGCTGAAGACAGAATGGAAAAGCATGACCCAGGAGGCCTTCCAGGAGAGCTCTGTG
AAGGAGCTGGGACGGCTGGAAGCCCAGCTGGCCAGCCTGCGGCAGGAGCTGGCTGCCCTGACTCTGAAGC
AGAACTCGGTGGCAGATGAAGTGGGCCTGCTGCCACAGAAGATCCAGGCTGCCAGGGCTGATGTGAGCGG
GAAGTACCCAGAGCCCTAC

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

Protein Sequence:

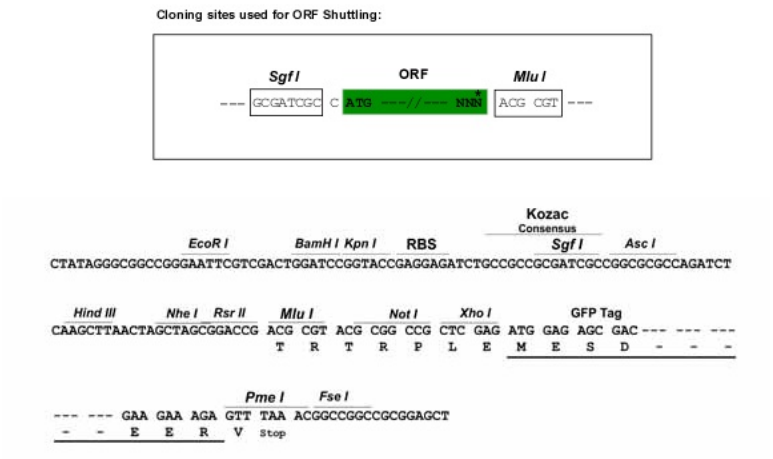
>MG207572 representing BC098208
Red=Cloning site Green=Tags(s)

MSRRSQRLTRYSQDDNDGGSSSSGASSVAGSQGTVFKDSPLRTLKRKSSNMKHLSPAPQLGPSSDSHTSY
YSESVVRESYIGSPRAVSLARSALLDDHLHSEPYWSGDLRGRRRRGTGGSESSKANGLTAESKASEDFFG
SSSGYSSEDDLAGYTDSDQHSSGSRLRSAASRAGSFVWTLVTFPGRLFGLLYWWIGTTWYRLTTAASLLD
VFVLTRHFSLNLKSFLWFLLLLLLLTGLTYGAWHFYPLGLQTLQPAVVSWWAAKESRKQPEVWESRDASQ
HFQAEQRVLSRVHSLERRLEALAADFSSNWQKEAIRLERLELRQGAAGHGGGSSLSHEDALSLLEGLVSR
REATLKEDLRRDTVAHIQEELATLRAEHHQDSEDLFKKIVQASQESEARVQQLKTEWKSMTQEAFQESSV
KELGRLEAQLASLRQELAALTLKQNSVADEVGLLPQKIQAARADVSGKYPEPY

TRTRPLE - GFP Tag - V

Restriction Sites: SgfI-MluI

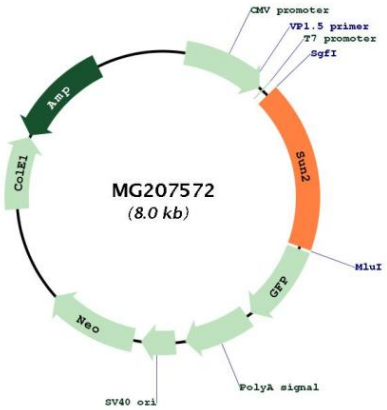
Cloning Scheme:



ACCN:	BC098208
ORF Size:	1421 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:	BC098208, AAH98208
RefSeq Size:	4142 bp
RefSeq ORF:	1421 bp
Locus ID:	223697
Cytogenetics:	15 E1

Gene Summary: As a component of the LINC (LInker of Nucleoskeleton and Cytoskeleton) complex, involved in the connection between the nuclear lamina and the cytoskeleton. The nucleocytoplasmic interactions established by the LINC complex play an important role in the transmission of mechanical forces across the nuclear envelope and in nuclear movement and positioning. Specifically, SYNE2 and SUN2 assemble in arrays of transmembrane actin-associated nuclear (TAN) lines which are bound to F-actin cables and couple the nucleus to retrograde actin flow during actin-dependent nuclear movement. Required for interkinetic nuclear migration (INM) and essential for nucleokinesis and centrosome-nucleus coupling during radial neuronal migration in the cerebral cortex and during glial migration. Required for nuclear migration in retinal photoreceptor progenitors implicating association with cytoplasmic dynein-dynactin and kinesin motor complexes, and probably B-type lamins; SUN1 and SUN2 seem to act redundantly. The SUN1/2:KASH5 LINC complex couples telomeres to microtubules during meiosis; SUN1 and SUN2 seem to act at least partial redundantly. Anchors chromosome movement in the prophase of meiosis and is involved in selective gene expression of coding and non-coding RNAs needed for gametogenesis. Required for telomere attachment to nuclear envelope and gametogenesis. May also function on endocytic vesicles as a receptor for Rab5-GDP and participate in the activation of Rab5.[UniProtKB/Swiss-Prot Function]

Product images:



Circular map for MG207572