

Product datasheet for **MG211540**

Bub1b (NM_009773) Mouse Tagged ORF Clone

Product data:

Product Type: Expression Plasmids
Product Name: Bub1b (NM_009773) Mouse Tagged ORF Clone
Tag: TurboGFP
Symbol: Bub1b
Synonyms: AU045529; BUBR1
Mammalian Cell Selection: Neomycin
Vector: pCMV6-AC-GFP (PS100010)
E. coli Selection: Ampicillin (100 ug/mL)
ORF Nucleotide Sequence: >MG211540 representing NM_009773
 Red=Cloning site Blue=ORF Green=Tags(s)

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 GCC**CGATCGCC**

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GCTGGGGGAAGACAATCAGCCCGGAAGCTTTGCTCACTCAGCAAGACAAGCAGCCAGGCGGCTCCAGAGC
CTGCC
    
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ACGCGTACGCGGCCGCTCGAG – GFP Tag – GTTTAA

Protein Sequence:

>MG211540 representing NM_009773
 Red=Cloning site Green=Tags(s)

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MAEASEAMCLEGAEWELSKENIQPLRHGRVMSTLQGALAKQESAGHTALQQQKRAFESIRFYSGDDPLD
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IGVSLAQFYISWAEYEARENFKKADIIIFQEGIERKAEPDLRLQSQHRQFQSRVSRQAFALGNEEEEAL
EPSEQRSSLAELKSRGKKMARAPISRVGGALKAPGQSRGFLNAVPPQVHGNRRITVFDENADTASRTEL
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PA
    
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TRTRPLE – GFP Tag – V

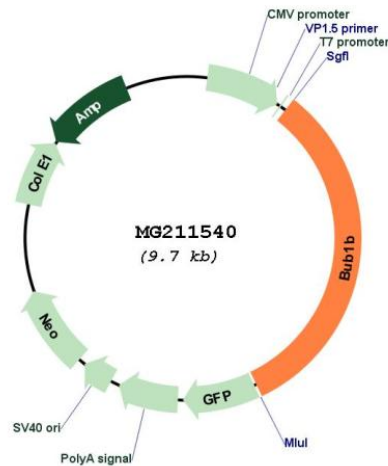
Restriction Sites:

Sgfl-MluI

Cloning Scheme:



Plasmid Map:



ACCN: NM_009773

ORF Size: 3156 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.

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| 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: | <u>NM_009773.3, NP_033903.2</u> |
| RefSeq Size: | 3669 bp |
| RefSeq ORF: | 3159 bp |
| Locus ID: | 12236 |
| UniProt ID: | <u>Q9Z1S0</u> |
| Cytogenetics: | 2 E5 |
| Gene Summary: | Essential component of the mitotic checkpoint. Required for normal mitosis progression and tumor suppression. The mitotic checkpoint delays anaphase until all chromosomes are properly attached to the mitotic spindle. One of its checkpoint functions is to inhibit the activity of the anaphase-promoting complex/cyclosome (APC/C) by blocking the binding of CDC20 to APC/C, independently of its kinase activity. The other is to monitor kinetochore activities that depend on the kinetochore motor CENPE. Required for kinetochore localization of CENPE. Negatively regulates PLK1 activity in interphase cells and suppresses centrosome amplification. Also implicated in triggering apoptosis in polyploid cells that exit aberrantly from mitotic arrest. Essential for tumor suppression. May play a role in regulating aging and fertility (By similarity).[UniProtKB/Swiss-Prot Function] |