

## Product datasheet for MR205615

### Sh3glb1 (NM\_019464) Mouse Tagged ORF Clone

#### Product data:

**Product Type:** Expression Plasmids  
**Product Name:** Sh3glb1 (NM\_019464) Mouse Tagged ORF Clone  
**Tag:** Myc-DDK  
**Symbol:** Sh3glb1  
**Synonyms:** AA409932; AI314629; AU015566; Bif-1; mKIAA0491  
**Mammalian Cell Selection:** Neomycin  
**Vector:** pCMV6-Entry (PS100001)  
**E. coli Selection:** Kanamycin (25 ug/mL)  
**ORF Nucleotide Sequence:** >MR205615 ORF sequence  
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCC**CGATCGC**C

ATGAACATCATGGATTTCAACGTGAAGAAGCTGGCGGCCGACGCGGGCACCTTCTCAGCCGGGCCGTGC  
 AGTTCACAGAAGAAAAGCTTGGCCAGGCAGAGAAGACAGAAGCTGGACGCTCACCTGGAAAACCTCCTTAG  
 CAAAGCTGAATGTACCAAAATATGGACAGAAAAGATAATGAAGCAGACCGAAGTGTCTTGCAGCCAAAT  
 CCAAATGCCAGGATAGAAGAATTTGTTTATGAGAACTGGATAGAAAAGCACCAAGTCGTATAAACAACC  
 CGGAACTTTTGGACAATATATGATTGATGCAGGAAGTGGTTTGGCCAGGGACAGCTTATGGAAATGC  
 CCTTATTAATGTGGAGAAACACAGAAGCGAATTGGAACAGCTGACCGAGAGCTGATTCAAACATCAGCC  
 TTAATTTCTCACTCCTTTAAGAACTTTATAGAAGGGATTACAAAACAATCGCAAAAAGAAAGGAAAC  
 TATTACAGAATAAGAGACTGGATTTGGATGCTGCAAAAACAAGACTAAAAAGGCAAAAGCTGCAGAAAAC  
 TAAAAGTTCATCTGAACAGGAATTGAGAATAACTCAAAGTGAATTTGATCGTCAGGCAGAGATTACCCGA  
 CTCCTGCTTGAGGGAATCAGCAGTACACACGCCCATCATCTCCGCTGTCTGAATGACTTTGTAGAAGCCC  
 AGATGACTTACTATGCACAGTGTACCAGTATATGCTAGACCTACAGAAGCAACTGGGAAGTTTTCCATC  
 CAATTATCTTTCTAACAACAATCAGACCTCTGGGACACCAGTCCCATATGCTTTGTCAAATGCAATTGGT  
 CCTTCTGCCAGGCTTCAACGGGTAGCCTTGAATCACCTGTCTTAACTCAATGACCTTAAAGAAT  
 CCAGCAACAACAGGAAGGCTAGGGTCTCTATGATTATGATGCTGCAAAATAGCACTGAAGTGTCACTCCT  
 GGCCGATGAGGTAACTACTGTGTTCAAGTGTGTTGGAATGGACTCCGACTGGCTAATGGGAGAGAGAGGA  
 AATCAAAAAGGCAAGGTGCCAATTACCTACTTAGAACTTCTCAAT

**ACGCGT**ACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAATGATATCCTGGATT  
 ACAAGGATGACGACGATAAGGTTTAA



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**Protein Sequence:** >MR205615 protein sequence  
 Red=Cloning site Green=Tags(s)

MNIMDFNVKLAADAGTFLSRAVQFTEEKLGQAEKTELEDAHLENLLSKAECTKIWTEKIMKQTEVLLQPN  
 PNARIEEFVYEKLDKAPSRINPELLGQYIMIDAGTEFGPGTAYGNALIKCGETQKRIGTADRELIQTSA  
 LNFLTPLRNFIEGDYKTIAKERKLLQNKRLDLDAKTRLLKAKAAETKSSSEQELRITQSEFDRQAEITR  
 LLLLEGISSTHAHHLRCLNDFVEAQMTYYAQCYQYMLDLQKQLGSPSNYLSNHNQTSGTPVPYALSNAIG  
 PSAQASTGSLVITCPNLNDLKESNNRKRVLVDYDAANSTELSLLADEVITVFVVGMDSDWLMGERG  
 NQKGVKVPITYLELLN

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

**Restriction Sites:**

Sgfl-MluI

**Cloning Scheme:**

Cloning sites used for ORF Shuttling:



\* The last codon before the Stop codon of the ORF

**ACCN:** NM\_019464

**ORF Size:** 1098 bp

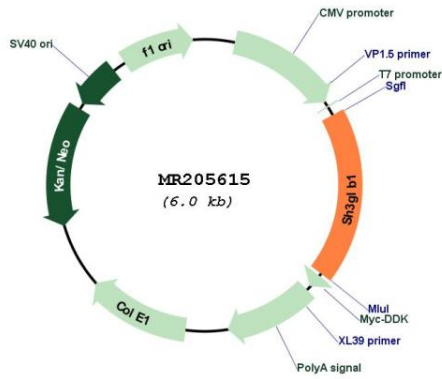
**OTI Disclaimer:** Due to the inherent nature of this plasmid, standard methods to replicate additional amounts of DNA in E. coli are highly likely to result in mutations and/or rearrangements. Therefore, OriGene does not guarantee the capability to replicate this plasmid DNA. Additional amounts of DNA can be purchased from OriGene with batch-specific, full-sequence verification at a reduced cost. Please contact our customer care team at [custsupport@origene.com](mailto:custsupport@origene.com) or by calling 301.340.3188 option 3 for pricing and delivery.

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.

<b>Components:</b>	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).
<b>Reconstitution Method:</b>	<ol style="list-style-type: none"><li>1. Centrifuge at 5,000xg for 5min.</li><li>2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.</li><li>3. Close the tube and incubate for 10 minutes at room temperature.</li><li>4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom.</li><li>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.</li></ol>
<b>RefSeq:</b>	<a href="#">NM_019464.3</a>
<b>RefSeq Size:</b>	5903 bp
<b>RefSeq ORF:</b>	1098 bp
<b>Locus ID:</b>	54673
<b>UniProt ID:</b>	<a href="#">Q9JK48</a>
<b>Cytogenetics:</b>	3 H2
<b>MW:</b>	40.9 kDa
<b>Gene Summary:</b>	May be required for normal outer mitochondrial membrane dynamics. Required for coatomer-mediated retrograde transport in certain cells (PubMed:17086176). May recruit other proteins to membranes with high curvature. May promote membrane fusion (By similarity). Involved in activation of caspase-dependent apoptosis by promoting BAX/BAK1 activation (PubMed:16227588). Isoform 1 acts proapoptotic in fibroblasts (PubMed:24523556). Involved in caspase-independent apoptosis during nutrition starvation and involved in the regulation of autophagy. Activates lipid kinase activity of PIK3C3 during autophagy probably by associating with the PI3K complex II (PI3KC3-C2). Associated with PI3KC3-C2 during autophagy may regulate the trafficking of ATG9A from the Golgi complex to the peripheral cytoplasm for the formation of autophagosomes by inducing Golgi membrane tubulation and fragmentation. Involved in regulation of degradative endocytic trafficking and cytokinesis, probably in the context of PI3KC3-C2 (By similarity). Isoform 2 acts antiapoptotic in neuronal cells; involved in maintenance of mitochondrial morphology and promotes neuronal viability (PubMed:24523556).[UniProtKB/Swiss-Prot Function]

Product images:



Circular map for MR205615