

Product datasheet for **MC227433**

Sh3glb1 (NM_001282037) Mouse Untagged Clone

Product data:

Product Type: Expression Plasmids
Product Name: Sh3glb1 (NM_001282037) Mouse Untagged Clone
Tag: Tag Free
Symbol: Sh3glb1
Synonyms: AA409932; AI314629; AU015566; Bif-1; mKIAA0491
Vector: pCMV6-Entry (PS100001)
E. coli Selection: Kanamycin (25 ug/mL)
Cell Selection: Neomycin
Fully Sequenced ORF: >MC227433 representing NM_001282037
Red=Cloning site Blue=ORF Orange=Stop codon

TTTTGTAATACGACTCACTATAGGGCGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**GCGATCGCC**

ATGAACATCATGGATTTCAACGTGAAGAAGCTGGCGGCCGACGCGGCACCTTCCTCAGCCGGCCGTGC
AGTTCACAGAAGAAAAGCTTGGCCAGGCAGAGAAGACAGAAGCTGGACGCTCACCTGGAAAACCTCCTTAG
CAAAGCTGAATGTACAAAATATGGACAGAAAAGATAATGAAGCAGACCGAAGTGTCTGTCAGCCAAAT
CCAAATGCCAGGATAGAAGAATTTGTTTATGAGAACTGGATAGAAAAGCACCAAGTCGTATAAACCAACC
CGGAACTTTTGGGACAATATATGATTGATGCAGGAAGTGGTTGGCCAGGGACAGCTTATGGAATGC
CCTTATTAATGTGGAGAAACACAGAAGCGAATTGGAACAGCTGACCGAGAGCTGATTCAAACATCAGCC
TAAATTTCTCACTCCTTTAAGAACTTTATAGAAGGGGATTACAAAACAATCGCAAAAGAAAGGAAAC
TATTACAGAATAAGAGACTGGATTTGGATGCTGCAAAAACAAGACTAAAAAGGCAAAAGCTGCAGAAAC
TAAAAGTTCACAATAACTCCGCCCGCCCTGAAGGAGATAACATTATGATTTGGCAGAGGAAGTGACA
AAATCTGAACAGGAATTGAGAATAACTCAAAGTGAATTTGATCGTCAGGCAGAGATTACCCGACTCCTGC
TTGAGGGAAATCAGCAGTACACACGCCCATCATCTCCGCTGTGAATGACTTTGTAGAAGCCAGATGAC
TTACTATGCACAGTGTTACCAATATATGCTAGACCTACAGAAGCAACTGGGAAGTTTTCCATCCAATTAT
CTTTCTAACAACAATCAGACCTCTGGGACACCAGTGCCATATGCTTTGTCAAATGCAATTGGTCTTCTG
CCCAGGCTTCAACGGGTAGCCTTGTAAATCACCTGTCTTCTAACCTCAATGACCTTAAAGAATCCAGCAA
CAACAGGAAGGCTAGGGTCTCTATGATTATGATGCTGCAAAATAGCACTGAACTGTCACTCCTGGCCGAT
GAGGTAATCACTGTGTTCAAGTGTGTTGGAATGGACTCCGACTGGCTAATGGGAGAGAGAGGAAATCAAA
AGGGCAAGGTGCCAATTACCTACTTAGAAGTCTCAAT**TAA**

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA

Restriction Sites: SgfI-MluI



ACCN:	NM_001282037
Insert Size:	1161 bp
OTI Disclaimer:	Our molecular clone sequence data has been matched to the reference identifier above as a point of reference. Note that the complete sequence of our molecular clones may differ from the sequence published for this corresponding reference, e.g., by representing an alternative RNA splicing form or single nucleotide polymorphism (SNP).
OTI Annotation:	Clone contains native stop codon, and expresses the complete ORF without any c-terminal tag.
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_001282037.1</u> , <u>NP_001268966.1</u>
RefSeq Size:	5966 bp
RefSeq ORF:	1161 bp
Locus ID:	54673
UniProt ID:	<u>Q9JK48</u>
Cytogenetics:	3 H2

Gene Summary:

May be required for normal outer mitochondrial membrane dynamics. Required for coatamer-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 PI3K3C3 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]

Transcript Variant: This variant (1) represents the longest transcript and encodes the longest isoform (1). Sequence Note: This RefSeq record was created from transcript and genomic sequence data to make the sequence consistent with the reference genome assembly. The genomic coordinates used for the transcript record were based on transcript alignments.