

Product datasheet for **MG201775**

Myo3b (BC034907) Mouse Tagged ORF Clone

Product data:

Product Type: Expression Plasmids
Product Name: Myo3b (BC034907) Mouse Tagged ORF Clone
Tag: TurboGFP
Symbol: Myo3b
Synonyms: A430065P19Rik
Mammalian Cell Selection: Neomycin
Vector: pCMV6-AC-GFP (PS100010)
E. coli Selection: Ampicillin (100 ug/mL)
ORF Nucleotide Sequence: >MG201775 representing BC034907
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGATCGCC**

ATGGATGAGGAGATTGAGGCTGAATACAACATTCTGCAGTTTCTCCCAGCCATCCCAACGTTGTAAGT
 TTTATGGGATGTTTTACAAAGCCGATCGCTGTGTGGGAGGACAGCTATGGCTGTTCTGGAGCTGTGTA
 TGGGGCTCTGCACTGAGCTTGTCAAGGGCTTCTGAGGTGCGGCAAGAGGCTGGACGAAGCTGTGATT
 TCCTACATTCTGTATGGAGCCCTCTGGGCCTTCAGCATTGCACTGCCACCGAATCATCCACCGAGATG
 TGAAGGGGAATAACATTCTTCTGACGACAGAAGGAGGAGTTAAGCTCGTTGACTTTGGTGTCTCTGCTCA
 ACTTACAAGCACACGGCTGCGGAGAAACACATCAGTTGGGACCCATTCTGGATGGCTCCTGAGGTCATT
 GCTTGGCAGCAGCAGTATGACTCGCTATGACGCTCGTTGTGACGTCTGGTCTTGGGCATCACAGCCA
 TTGAGCTGGGAGATGGAGACCCTCCCCTCTTGAATGCATCCTGTGAAAATGCTCTTTAAGATACCAAG
 CATT

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

Protein Sequence: >MG201775 representing BC034907
 Red=Cloning site Green=Tags(s)

MDEEIEAEYNILQFLPSHPNVVKFYGMFYKADRCVGGQLWLVELELCNGGSVTELVKGLLRCKRLDEAVI
 SYILYGALLGLQLHCHRIIHRDVKGNNILLTTEGGVKLVDFGVSAQLTSTRLLRNTSVGTPFWMAPEVI
 ACEQQYDSSYDARCDVWSLGITAIELGDGPPLFEMHPVKMLFKIPSI

TRTRPLE - GFP Tag - V

Restriction Sites: SgfI-MluI



Cloning Scheme:


ACCN: BC034907

ORF Size: 564 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: [BC034907.1](#)

RefSeq Size: 1363 bp

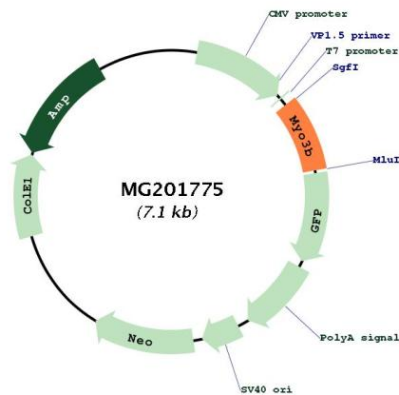
RefSeq ORF: 566 bp

Locus ID: 329421

Cytogenetics: 2 C2

Gene Summary:

Probable actin-based motor with a protein kinase activity (By similarity). Required for normal cochlear hair bundle development and hearing. Plays an important role in the early steps of cochlear hair bundle morphogenesis. Influences the number and lengths of stereocilia to be produced and limits the growth of microvilli within the forming auditory hair bundles thereby contributing to the architecture of the hair bundle, including its staircase pattern (PubMed:26754646). Involved in the elongation of actin in stereocilia tips by transporting the actin regulatory factor ESPN to the plus ends of actin filaments (PubMed:22264607). [UniProtKB/Swiss-Prot Function]

Product images:

Circular map for MG201775