

Product datasheet for SC300039

OriGene Technologies, Inc.

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Myosin VIIa (MYO7A) (NM 000260) Human Untagged Clone

Product data:

Product Type: Expression Plasmids

Product Name: Myosin VIIa (MYO7A) (NM_000260) Human Untagged Clone

Tag: Tag Free

Symbol: Myosin VIIa

Synonyms: DFNA11; DFNB2; MYOVIIA; MYU7A; NSRD2; USH1B

Mammalian Cell

Selection:

ACCN:

Neomycin

Vector: pCMV6-Entry (PS100001) E. coli Selection: Kanamycin (25 ug/mL)

Restriction Sites: Sgfl-Mlul

NM_000260 Insert Size: 6648 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 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 TrueClone is provided through our Custom Cloning Process that includes sub-cloning

> into OriGene's pCMV6 vector and full sequencing to provide a non-variant match to the expected reference without frameshifts, and is delivered as lyophilized plasmid DNA.

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: <u>NM 000260.3</u>

 RefSeq Size:
 7465 bp

 RefSeq ORF:
 6648 bp

 Locus ID:
 4647

 UniProt ID:
 Q13402

 Cytogenetics:
 11q13.5

 MW:
 254.4 kDa

Gene Summary:

This gene is a member of the myosin gene family. Myosins are mechanochemical proteins characterized by the presence of a motor domain, an actin-binding domain, a neck domain that interacts with other proteins, and a tail domain that serves as an anchor. This gene encodes an unconventional myosin with a very short tail. Defects in this gene are associated with the mouse shaker-1 phenotype and the human Usher syndrome 1B which are characterized by deafness, reduced vestibular function, and (in human) retinal degeneration. Alternative splicing results in multiple transcript variants. [provided by RefSeq, Jul 2008] Transcript Variant: This variant (1) represents the longest transcript and encodes the longest isoform (1). Sequence Note: The update from NM_00260.1 to NM_00260.2 was intended to only modify select nucleotide residues that did not match the reference genome; however, the update mistakenly represented use of an alternate splice donor and splice acceptor site. NM_00260.2 was subsequently updated to version 3 to represent the original exon and splice site combination. The difference between NM_000260.1 and NM_000260.3 involve single residue changes to match the reference genome.