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Product datasheet for MC225211

Myo7a (NM_008663) Mouse Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Myo7a (NM_008663) Mouse Untagged Clone
Tag:	Tag Free
Symbol:	Myo7a
Synonyms:	Hdb; Myo7; nmf371; polka; sh-1; sh1; USH1B
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)

Fully Sequenced ORF:

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>MC225211 representing NM_008663
Red=Cloning site Blue=ORF Orange=Stop codon

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCCGCGATCGCC

ATGGTTATTCTGCAGAAGGGGGACTATGTATGGATGGACCTGAAGTCAGGCCAGGAGTTTGATGTGCCCA
TCGGGGCCGTGGTGAAGCTCTGCGACTCGGGCCAGATCCAGGTGGTGGATGATGAAGACAATGAACACTG
GATATCCCCTCAGAATGCCACGCACATCAAGCCAATGCACCCCACATCGGTGCACGGCGTGGAGGACATG
ATCCGCCTGGGGGATCTCAACGAGGCAGGCATCCTTCGAAACCTTCTCATTCGCTACCGGGACCACCTCA
TCTATACGTACACAGGTTCCATCCTGGTGGCCGTGAACCCCTACCAGCTGCTCTCCATCTACTCGCCAGA
GCACATCCGCCAGTACACCAACAAGAAGATAGGGGAGATGCCCCCCCACATCTTCGCCATTGCTGACAAC
TGCTACTTCAACATGAAACGCAACAACCGGGACCAGTGCTGTATTATCAGCGGGGAGTCGGGAGCTGGCA
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GCAGGTGCTGGAGGCCACCCCGATCCTGGAAGCATTTGGGAACGCCAAGACCATCCGCAACGACAACTCT
AGCCGCTTTGGCAAGTACATTGACATCCACTTTAACAAGCGTGGTGCCATCGAGGGCGCCAAAATAGAGC
AATACCTGCTGGAGAAGTCACGTGTCTGCCGCCAGGCCCCTGACGAGAGGAACTATCACGTGTTCTACTG
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CATGGGCAATCTGCAGTATGAGGCCCGGACATTTGAGAACTTGGATGCGTGTGAAGTCCTCTTCTCCCCA
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GCACGTGTTCAAGCTGGAGCAGGAGGAGTACGACCTGGAGAGCATCGACTGGTTGCACATTGAGTTCACT
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GACAACCAGGAAGCACTGGACATGATTGCCAACCGGCCTATGAACGTCATCTCCCTCATCGATGAGGAGA
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CCCGGAACAAGTTCATAAAGCAGATTTTCCAAGCTGACGTTGCCATGGGTGCCGAGACCAGGAAGCGCTC
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CGGAACTCGGACACAGCCACCCAGCTGGCTGGAGCTGCAGGCCACCAAGTCCAAGAAGCCCATCATGTTG
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TGGGGAGTACAGGTGTGAGAAGGAGGACGACCTGGCTGAGCTGGCTTCTCAGCAGTACTTTGTGGACTAT
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CCGGCTCCTGCAGCTTCGCACAGCAGAGCCAGAGGTGCGCGCCAAGCCCTACACGCTAGAGGAGTTCTCC
TACGACTACTTCAGGCCCCCACCCAAGCACACGCTGAGCCGTGTCATGGTGTCCAAGGCCCGCGGTAAGG

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ACAGGCTGTGGAGCCACACACGAGAGCCCCTCAAGCAGGCCCTGCTCAAGAAGATCCTGGGCAGTGAAGA
ACTCTCCCAGGAAGCCTGCATGGCCTTTGTAGCTGTGCTCAAGTACATGGGCGACTACCCATCCAAGAGG
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CCAAGGAGGAAGCCAAGCTGGCCTTCCTCAAACTCATCTTCAAGTGGCCCACCTTTGGCTCAGCCTTCTT
TGAGGTGAAGCAAACTACAGAACCAAACTTCCCAGAGATTCTCTTAATTGCCATCAACAAGTACGGGGTC
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GCTGGGATACAAAATGGATGATCTTCTGACTTCCTACATCAGCCAGATGCTCACAGCCATGAGCAAGCAG
AGGAACTCCAGGAGTGGAAGGTGA

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA

Restriction Sites: SgfI-MluI

ACCN: NM_008663

Insert Size: 6534 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).

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: NM_008663.2, NP_032689.2

RefSeq Size: 7361 bp

RefSeq ORF: 6534 bp

Locus ID: 17921

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UniProt ID:	P97479
Cytogenetics:	7 53.57 cM
Gene Summary:	Myosins are actin-based motor molecules with ATPase activity. Unconventional myosins serve in intracellular movements. Their highly divergent tails bind to membranous compartments, which are then moved relative to actin filaments. In the retina, plays an important role in the renewal of the outer photoreceptor disks. Plays an important role in the distribution and migration of retinal pigment epithelial (RPE) melanosomes and phagosomes, and in the regulation of opsin transport in retinal photoreceptors. Mediates intracellular transport of RPE65 in the retina pigment epithelium. In the inner ear, plays an important role in differentiation, morphogenesis and organization of cochlear hair cell bundles. Motor protein that is a part of the functional network formed by USH1C, USH1G, CDH23 and MYO7A that mediates mechanotransduction in cochlear hair cells. Required for normal hearing. Involved in hair-cell vesicle trafficking of aminoglycosides, which are known to induce ototoxicity. [UniProtKB/Swiss-Prot Function] Transcript Variant: This variant (2) lacks an in-frame segment in the coding region, compared to variant 1. The resulting isoform (2) is shorter than isoform 1.

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