

## Product datasheet for **SC326405**

### MYO5A (NM\_001142495) Human Untagged Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	MYO5A (NM_001142495) Human Untagged Clone
Tag:	Tag Free
Symbol:	MYO5A
Synonyms:	GS1; MYH12; MYO5; MYR12
Vector:	<u>pCMV6 series</u>

**Fully Sequenced ORF:** >NCBI ORF sequence for NM\_001142495, the custom clone sequence may differ by one or more nucleotides

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ATGGCTGCGTCGGAGCTCTACACAAAGTTTGCCAGGGTTTGGATACCTGATCCAGAGGAA
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AAATCAAGCAAGTTTAAGATGCTACCAGAACTATTTCAAGATGATGAGAAGGCCATCAGT  
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 CCAGTTAATGAGTTTGAAGAAAGAGTCTCTGTGTCGTTTCATTTCGACTATACAGATGCGT  
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 ACCTTTCTTTCAACCCATCTTCCCTCGCACTAGAAACCATCCAGATTCCAGCCAGCCTC  
 GGCCTGGGCTTCATTTACGGGTC

- Restriction Sites:** Please inquire
- ACCN:** NM\_001142495
- 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:** 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:** [NM\\_001142495.1](#), [NP\\_001135967.1](#)
- RefSeq Size:** 12157 bp
- RefSeq ORF:** 5487 bp
- Locus ID:** 4644
- Cytogenetics:** 15q21.2

**Gene Summary:**

This gene is one of three myosin V heavy-chain genes, belonging to the myosin gene superfamily. Myosin V is a class of actin-based motor proteins involved in cytoplasmic vesicle transport and anchorage, spindle-pole alignment and mRNA translocation. The protein encoded by this gene is abundant in melanocytes and nerve cells. Mutations in this gene cause Griscelli syndrome type-1 (GS1), Griscelli syndrome type-3 (GS3) and neuroectodermal melanolysosomal disease, or Elejalde disease. Multiple alternatively spliced transcript variants encoding different isoforms have been reported, but the full-length nature of some variants has not been determined. [provided by RefSeq, Dec 2008]

Transcript Variant: This variant (2) lacks an in-frame exon in the CDS, resulting in a shorter isoform (2), as compared to variant 1.