

## Product datasheet for **SC105010**

### **MYO9B (AK002201) Human Untagged Clone**

#### Product data:

Product Type:	Expression Plasmids
Product Name:	MYO9B (AK002201) Human Untagged Clone
Tag:	Tag Free
Symbol:	MYO9B
Synonyms:	CELIAC4; MYR5
Mammalian Cell Selection:	None
Vector:	<u>pCMV6-XL4</u>
E. coli Selection:	Ampicillin (100 ug/mL)
Fully Sequenced ORF:	>NCBI ORF sequence for AK002201, the custom clone sequence may differ by one or more nucleotides

```
ATGTCACCTGGGGCGCTGGCCATTATCTTCGCACCCTGCCTCCTGCGCTGCCCTGACAACTCGGACCCGC
TGACCAGCATGAAGGACGTCTCAAGATCACCACGTGCGTGGAGATGCTGATCAAGGAGCAGATGAGGAA
ATACAAAGTGAAGATGGAGGAGATCAGCCAAGTGGAGGCTGCAGAGAGTATCGCCTTCCGCAGGCTTTCG
CTCCTGCGACAAAATGCTCCATGGCCTCTCAAAGTGGGGTTTTCGTCTCCCTATGAGGGGGTCTGAACA
AGAGCCCCAAGACCCGGGACATCCAGGAGGAGGAGCCGGAGGTGCTGCTGGAGGAGGAGGCCCGGCGG
CGATGAGGACCGGAAAAGGAGATTCTCATTGAACGGATCCAGTCCATCAAGGAGGAGAAGGAGGACATC
ACCTACCGGCTGCCGGAGCTGGACCAAGGGGCTCGGACGAGGAGAACCTGGACTCGGAGACGTCGGCCA
GCACCGAGAGCCTGCTGGAGGAGCGGGCCGGGGGGCCTCGGAAGGTCAGTATTAA
```



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**5' Read Nucleotide Sequence:**

>OriGene 5' read for AK002201 unedited  
 NGGGGTACATATTTGTATACGACTCATATAGGCGGCCGCGCAGTCGGGTGCTGCCAA  
 CCGCACTCGGGAGCTCCGGCAGGCGCTGCAGACAGACCCCGCAGCAGTCAAGCTGGAGAA  
 CTTCCCATCCACGCCATCACAGGGGTGCTGAAGCAGTGGCTGCGGGAGCTGCCGAGCC  
 CCTCATGACCTTCGCACAGTACGGCGACTTCTCCGAGCCGTCGAGTCCCGGAGAAGCA  
 GGAGCAGCTGGCTGCCATCTATGCCGTCCTGGAGCACCTTCCAGAAGCCAACCACAACCT  
 CCTGGAGAGACTCATCTTCCACCTTGTC AAGGTGGCCCTGCTCGAGGATGTCAACCGCAT  
 GTCACCTGGGGCGCTGGCCATTATCTTCGCACCCCTGCCTCCTGCGCTGCCCTGACAACCT  
 GGACCCGCTGACCAGCATGAAGGACGTCCTCAAGATCACCACGTGCGTGGAGATGCTGAT  
 CAAGGAGCAGATGAGGAAATACAAAGTGAAGATGGAGGAGATCAGCCAACCTGGAGGCTGC  
 AGAGAGTATCGCCTTCCGCAGGCTTTCGCTCCTGCGACAAAATGCTAACAAAGAGCCCAA  
 GACCCGGGACATCCAGGAGGAGGAGCTGGAGGTGCTGCTGGAGGAGGAGGCAGCCGGCGG  
 CGATGAGGACCGGAAAAGGAGATTCTCATTGAACGGATCCAGTCCATCAAGGAGGAGAA  
 GGAGGACATCACCTACCGGCTGCCGAGCTGGACCCANGNGCTCGGACGAGGAGAACCT  
 GGACTCGGAGACGTCGGCCAGCACCGAAAGCCTGCTGGAGAAGCGGCCCGGGGGGGCC  
 TCCGAAAGTCAGTATTAAGGCCCCCTGGGGCTGGTCTCCCTTGCCCGCGCGCCAC

**3' Read Nucleotide Sequence:**

>OriGene 3' read for AK002201 unedited  
 NCCGTCTTCTATGTACGCGGCCGCTTTCTANGATCGATTTTTTTTTTTTTTTTTTTTTTTT  
 TTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTCCATTAAGGCTGTACAGTTAAATTTCC  
 TTAACCACGTCACAAAAACATTTAAACGTACAAAAGGGGATTGGGAAATTTAAGGC  
 CCCAGGTGAAATTTGGGGCTCCCCACAGGTGCCTCCATTATTTGGGGGCTGCGTGAAG  
 GGGCCTGGTTCCAACCGCCTTCCCTGCCTTGATTTTGCATTTGGGGCCGGGCCCCAC  
 CTAAACGTAACCTTTGAGCTTTTGATTCTGGATCCTTTTTTGGAGGCAAAACTATTTTT  
 GAAGTTTTGGCCCCATTTCCAGTGCAGGGGCCGTCCTCGGACATGCAAAATTTGTCAGC  
 TGTGGCTTAAACCTTTGGTCTGGCCCGAGGCGGGGGGAGGCATTACTTTGGGGATCC  
 AATTACCTCCGTTTGGCCCCAGGTGGCTGGCCATCCTTTTTTAGGGGCTCCAGGGCCCCC  
 TGCAGTGGCAGGTCTGCCCGGGCGTGATGTACACGGAATGTTTTGGTCCGGGCGGCGG  
 GCAGGTGGCTCCCGGCGCCGATTTGGGGCATCCGCCTCCCGGGCACCCGGTGCCATCGA  
 GGCAGGTGGAAGGGCAGGCCCTGGGGAACTTGATGTTTGGCCGTGGGCATAATGGGGG  
 GTCGCCGGGGGTCTCCACTCTGACCGTTACAAAGACAACGGCCTTCGTCTTGGAGGGCC  
 GCCCCCGGGGGGAGGGCCCTCGGGGGGGGCCCCCGGGCCAGGGGAAAACAGCCCCA  
 GGGGCCCTTTATTCTTGACTTCCGAAGCCCC

**Restriction Sites:**

NotI-NotI

**ACCN:**

AK002201

**Insert Size:**

1750 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:** [AK002201.1](#), [BAA92132.1](#)

**RefSeq Size:** 2087 bp

**RefSeq ORF:** 549 bp

**Locus ID:** 4650

**Cytogenetics:** 19p13.11

**Gene Summary:** This gene encodes a member of the myosin family of actin-based molecular motor heavy chain proteins. The protein represents an unconventional myosin; it should not be confused with the conventional non-muscle myosin-9 (MYH9). The protein has four IQ motifs located in the neck domain that bind calmodulin, which serves as a light chain. The protein complex has a single-headed structure and exhibits processive movement on actin filaments toward the minus-end. The protein also has rho-GTPase activity. Polymorphisms in this gene are associated with celiac disease and ulcerative colitis susceptibility. Multiple transcript variants encoding different isoforms have been found for this gene. [provided by RefSeq, Dec 2011]