

## Product datasheet for **SC323595**

### Myosin IIIB (MYO3B) (NM\_138995) Human Untagged Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	Myosin IIIB (MYO3B) (NM_138995) Human Untagged Clone
Tag:	Tag Free
Symbol:	Myosin IIIB
Mammalian Cell Selection:	None
Vector:	<u>pCMV6-XL4</u>
E. coli Selection:	Ampicillin (100 ug/mL)
Fully Sequenced ORF:	>NCBI ORF sequence for NM_138995, the custom clone sequence may differ by one or more nucleotides

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ATGAAACATCTGTATGGATTATTTCACTATAATCCTATGATGCTTGGACTTGAATCACTTCCAGATCCCA
CAGACACCTGGGAAATTATAGAGACCATTGGTAAAGGCACCTATGGCAAAGTCTACAAGGTAACATAACA
GAGAGATGGGAGCCTGGCTGCAGTGAAAATTTGGATCCAGTCAGTGATATGGATGAAGAAATTTAGGGCA
GAATACAACATTTTGCAGTTCCTTCTAATCATCCCAATGTTGTAAGTTTTATGGGATGTTTTACAAAG
CGGATCACTGTGTAGGGGACAGCTGTGGCTGGTCTGGAGCTGTGTAATGGGGGCTCAGTCACTGAGCT
TGTCAAAGGTCTACTCAGATGTGGCCAGCGTTGGATGAAGCAATGATCTCATACATCTTGTACGGGGCC
CTTTGGGCTTCAGCATTGTCACAACAACCGAATCATCCACCGTGTGAAGGGGAATAACATCTTTC
TGACAACAGAAGGAGGATTAAGCTCGTTGACTTTGGTGTTCAGCTCAACTCACCAGTACACGCTCTGCG
GAGAAACACATCTGTTGGCACCCGTTCTGGATGGCCCTGAGGTCATTGCCTGTGAGCAGCAGTATGAC
TCTTCTATGACGCTCGCTGTGACGTCTGGTCTTGGGGATCACAGCTATTGAACTGGGGATGGAGACC
CTCCCCTCTTTGACATGCATCCTGTGAAAACACTCTTTAAGATCCAAGAAATCCTCCACCTACTTTACT
TCATCCAGAAAAATGGTGTGAAGAATCAACCCTTTATTTACAGTGTCTTATTAAGGATTTTGAAGG
CGACCTCCGTCACACATCTCCTTGACCACCCATTTAATAAGGAGTACATGGAAAAGTTCTGTTTCTGC
AAAAACAGCTGGCAAGGTTCTCCAAGACCAGAAGCATAAAATCCTGTTGCTAAAACAGGCATGAGAG
GATGCATACCAGAAGACCTTATCATGTGGAAGATGCTGAAAAATACTGCCTTGAGGATGATTTGGTCAAC
CTAGAGGTTCTGGATGAGGATACAATTATCCATCAGTTGCAGAAACGTTATGCAGACTTGCTAATTTACA
CATATGTTGGAGACATCTTAATTGCCTTAACCCCTTCCAGAATCTAAGCATATACTCTCCACAGTTTTTC
CAGACTTTATCATGGGGTGAACGCGCCTCCAATCCCCCCACATATTTGCATCAGCAGATGCTGCTTAC
CAGTGCATGGTTACTCTCAGCAAAGACCAGTGCATTGTCATCAGCGGAGAGAGTGCTCTGGGAAGACAG
AAAGCGCCACCTGATTGTTGAGCATTGACTTCTTGGGAAAGGCCAATAATCAGACCTTGAGAGAGAA
AATTCTACAAGTCAACTCCCTGGTGAAGCCTTGGGAACTCATGCACTGCCATCAATGACAACCTGAGC
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ATCTCCTGGAAAAATCCAGAGTTATAAAACAGGCAGCGAGAGAGAAAAATTTTCATATTTTACTATAT
TTATGCTGGTCTTCATACCCAAAAGAAGCTTTCTGATTTTCAGACTTCTGAGGAAAAACCTCCTAGGTAC
ATAGCTGATGAACTGGAAGGGTGTGCACGACATAAATTCCAAGGAGTCTTACAGAAGACAATTCGAAG

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CAATTCAGCATTGCTTCAGGATTATAGGGTTCACGGACAAGAGGTGCACTCAGTGTACAGAATTTTGGC
TGGGATTTTGAATATTGGGAACATTGAGTTCGCAGCTATTTCTCTCAACATCAGACTGATAAAAGTGAG
GTGCCAATGCTGAAGCTTTGCAAAATGCTGCCTCTGTTCTGTGCATTAGCCCTGAAGAGCTCCAGGAGG
CCCTCACCTCCCCTGTGTGGTCAACCCGGGGCAGACCATCATCCGTGCCAACACTGTAGACAGGGCTGC
GGACGTTTCAGACGCCATGTCCAAGCCCTGTATGGGAGGCTCTCAGCTGGATTGTGAATCGCATTAAAT
ACACTCCTGCAGCCAGACGAAAAATATGTAGTGCAGGAGGTGGAATGAATGTGGGGATCTGGATATCT
TTGGATTCGAGAATTTTCAGAGAAATTCATTTGAGCAGCTTCGCATAAACATCGCCAATGAGCAAAATCCA
GTACTATTTCAATCAGCATGTTTTGCTCTTGAGCAGATGGAATATCAGAATGAAGGCATTGATGCTGTA
CCCGTGGAAATATGAGGACAACCCCGCTCTTGACATGTTCTCCAGAAACCCCTGGGACTGCTTGCAC
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TGAGAACGTCAGAAAACAAGCTTCTTCAGCAGCTCTTCTCAATCCCTCTGACCAAAACAGGTAATTTGGC
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GGGATTCTGGAGACAGTCAGCATCCGCCGCCAGGGCTATTTCCACCGCATCTTTTTGAAGAATTTGTGA
AAAGGTATTACTTGGCATTACAGCACATCAAAACCTCTTGTCTAGCAAAGAGAGCTGTGTGGCTAT
CTTGAAAAGTCCAGATTAGATCACTGGTACTGGGAAAAACAAGGTTTTTCTCAAATATTACCATGTT
GAGCAATTAATTTGCTGCTTCGAGAAGTCATAGGCAGAGTGGTTGTGCTGCAGGCATATACCAAGGGT
GGCTTGGAGCCAGGAGATACAAAAGGGTCAGAGAGAAGAGAGAAGGGAGCCATTGCCATCCAGTCAGC
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GTGCCGAGGTTCAAGACTGCAGCGAGCCTGGTGCATATAAGTTCTCAGGGGCTCTGTACATCGTAGGAG
CCATTCACAAGCAGAATCCAACAATGGCCGTACACAGACTTCAAGCAACTCTCTGCTGTACAGAGAAA
AATGGGCATTACAAGCCAGAGTTCTCAAAGGGTGCATATCTTCGAGGACATGCAAAACAAGCACT
CGGTTTCTGGGACTGATTTGCTGTCTTCTCGGATATGCCATCCTGCTCCAGATCAGCAAGGATTGAGTCT
CTGGGGAGCCCTCAAAGCCTGGTTGAGAAAATGGTCTTGCACAGAAGCATCGAACACCTCGCCGACGA
TGTGAGCAGCCAAAATGCTGAGTAGCCCTGAGGACACCATGACTATAACCAGTTAAATGGAACCTAG
AATATCAAGGGAGCAAGAGGAAGCAAGAAAATTTGGCCAAATCAAAGTACTTGTATGGGGAAGATGAATA
TTCAAATCTCTGTACCAGTGGACTGTATCCCTGAGGAGAACAACCTCAGCCACCCTTCTTTTTTTCT
TCATCCTCAAAGGAGACTCTTTTGTCTCAACATTA
    
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**5' Read Nucleotide Sequence:**

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>OriGene 5' read for mutant NM_138995 unedited
ACCGCCGTTGAGCAATGGGCGGTAGGCGTGTACGGTGGGAGGTCTATATAAGCAGAGCTCGTTTAGTGA
ACCGTCAGAATTTTGAATACGACTCACTATAGGGCGGCCGGAATTCGGCACGAGCAACAAGGAAACAT
CTGTATGGATTATTTCACTATAATCCTATGATGCTTGGACTTGAATCACTTCCAGATCCCACAGACACCT
GGGAAATTATAGAGACCATTTGGTAAAGGCACCTATGGCAAAGTCTACAAGGTAACATAACAAGAGAGATGG
GAGCCTGGCTGCAGTGATGATTCTGGATCCAGTCAGTGATATGGATGAAGAAATTGAGGCAGAATACAAC
ATTTTTGCAGTTCCTTCCATCATCCCAATGTTTGTAAGTTTTTATGGGGATGGTTTTAACAAAGCCG
GATCACTGTGTAGGGGACCAGCTGTGGCTGGTCTGAGCTTGTGTAATGGGGGGCTCAGTCACTGAGCT
TGTCAGGTCTACTTAAATGTGGCAGCCGGTTGATTGAAGCCATGATTCTAAACTCTTGTCCGGGGCCC
CTCTTGGCCCTTCAAGATTGGCACAACACGGATATATCCACCTTTGGTTGAAGGGAAATAACATCTCTT
CGGCACAACAAAGGGGAGATTAAGCTGTTGACTTGGGTTTTCAGCTACACTCACAATACGTCTCTCGCGGA
AACACATGTGTGCCCCCGCTTTGAGAGGCCCTGAGCTATCTGTAGACAGATAGACTTCTCATAACTCCGT
GAACTGGCCTGGATACAATTAATGGGAGGAACCCCTTGACGCCTGGAACCTGATTGCAATTCGAAATAT
TCGGAAGTGGATTTTCGATACGCTTAAGTAGACTTGGCACTTTGACAAATTAGACCTG
    
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<b>Kinase Domain Sequence:</b>	>SC323595 kinase domain raw sequence. By performing <a href="#">BLASTX</a> analysis with this sequence against NCBI reference protein database, you can confirm the presence of the kinase-deficient mutation ACKTTGMGCATGGGCGGTAGGCGTGTACGGTGGGAGGTCTATATAAGCAGAGCTCGTTTAGTGAACCGTC AGAATTTTGTAAATACGACTCACTATAGGGCGGCCGGAATTCGGCAGCAGCAACAAGGAAACATCTGTAT GGATTATTTCACTATAATCCTATGATGCTTGGACTTGAATCACTCCAGATCCCACAGACACCTGGGAAA TTATAGAGACCATTGGTAAAGGCACCTATGGCAAAGTCTACAAGG
<b>Restriction Sites:</b>	Please inquire
<b>ACCN:</b>	NM_138995
<b>Insert Size:</b>	4800 bp
<b>OTI Disclaimer:</b>	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).
<b>OTI Annotation:</b>	This kinase-deficient mutant clone was generated by created by site-directed mutagenesis from the corresponding wild-type clone. See details in "Application of active and kinase-deficient kinome collection for identification of kinases regulating hedgehog signaling." <a href="#">Cell. 2008 May p536-548.</a>
<b>Components:</b>	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).
<b>Reconstitution Method:</b>	<ol style="list-style-type: none"> <li>1. Centrifuge at 5,000xg for 5min.</li> <li>2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.</li> <li>3. Close the tube and incubate for 10 minutes at room temperature.</li> <li>4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom.</li> <li>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.</li> </ol>
<b>RefSeq:</b>	<a href="#">NM_138995.1</a> , <a href="#">NP_620482.1</a>
<b>RefSeq Size:</b>	5560 bp
<b>RefSeq ORF:</b>	3837 bp
<b>Locus ID:</b>	140469
<b>UniProt ID:</b>	<a href="#">Q8WXR4</a>
<b>Cytogenetics:</b>	2q31.1
<b>Protein Families:</b>	Druggable Genome, Protein Kinase

**Gene Summary:**

This gene encodes one of the class III myosins. Myosins are ATPases, activated by actin, that move along actin filaments in the cell. This class of myosins are characterized by an amino-terminal kinase domain and shown to be present in photoreceptors. Alternative splicing results in multiple transcript variants encoding different isoforms. [provided by RefSeq, Mar 2014]

Transcript Variant: This variant (2) encodes the longer isoform (2). Sequence Note: This RefSeq record was created from transcript and genomic sequence data to make the sequence consistent with the reference genome assembly. The genomic coordinates used for the transcript record were based on transcript alignments.