

## Product datasheet for **SC109439**

### MID1 (NM\_033291) Human Untagged Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	MID1 (NM_033291) Human Untagged Clone
Tag:	Tag Free
Symbol:	MID1
Synonyms:	OS, FXY, OSX, OGS1, XPRF, BBBG1, GBBB1, RNF59, ZNFXY, TRIM18
Mammalian Cell Selection:	None
Vector:	<u><a href="#">pCMV6-XL4</a></u>
E. coli Selection:	Ampicillin (100 ug/mL)



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**Fully Sequenced ORF:** >NCBI ORF sequence for NM\_033291, the custom clone sequence may differ by one or more nucleotides

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ATGGAACACTGGAGTCAGAACTGACCTGCCCTATTTGTCTGGAGCTCTTTGAGGACCCCTCTTCTACTGC
CCTGCGCACACAGCCTCTGCTTCAACTGCGCCACCCGCATCCTAGTATCACACTGTGCCACCAACGAGTC
TGTGGAGTCCATACCGCCTTCCAGTGCCCCACCTGCCGGCATGTCATCACCCCTAGCCAGCGAGGTCTA
GACGGGCTCAAGCGCAAGTCCACCTACAGAACATCATCGACAGTTCCAGAAAGCATCAGTGAGCGGGC
CCAACCTCTCCAGCGAGACCCGTCGGGAGCGGGCCTTTGACGCCAACACCATGACCTCCGCCGAGAAGGT
CCTCTGCCAGTTTTGTGACCAGGATCCTGCCAGGACGCTGTGAAGACCTGTGTCACTTGTGAAGTATCC
TACTGTGACGAGTGCCTGAAAGCCACTACCCGAATAAGAAGCCCTTTACAGGCCATCGTCTGATTGAGC
CAATTCGGACTCTCACATCCGGGGCTGATGTGCTTGGAGCATGAGGATGAGAAGGTGAATATGTACTG
TGTGACCGATGACCAGTTAATCTGTGCCTTGTGTAACCTGGTGGCGGCACCCGATCATCAGGTGGCA
GCTTTGAGTGAGCGCTATGACAAATTGAAGCAAACTTAGAGAGTAACCTCACCAACCTTATTAAGAGGA
ACACAGAACTGGAGACCCCTTTGGCTAACTCATCCAAACCTGTCAACATGTTGAAGTCAATGCATCAGC
TCAAGAAGCCAAATTGACAGAGGAGTGTGATCTTCTCATTGAGATCATTAGCAAAAGACGACAGATTATT
GGAACCAAGATCAAGAAGGGAAGGTGATGAGGCTTCGCAAACTGGCTCAGCAGATTGCAAACTGCAAAAC
AGTGCATTGAGCGGTGAGCATCACTCATCTCCAAAGCGGAACACTCTCTGAAGGAGAATGATCATGCGCG
TTTCTACAGACTGCTAAGAATATCACCGAGAGAGTCTCCATGGCAACTGCATCTCCAGGTTCTAATT
CCTGAAATCAACCTCAATGACACATTTGACACCTTTGCCTTAGATTTTTCCCGAGAGAAGAACTGCTAG
AATGTCTGGATTACCTTACAGCTCCCAACCCTCCACAATTAGAGAAGAGCTCTGCACAGCTTATATGA
CACCACACTGTGCATTTGACCTCCGATGATGAGTTACGCGTGGTCTCCTACGAGCTCCAGTACACCATA
TTCACCGACAAGCCAACGTCGTTAGTCTGTGTAATTCCGCTGATAGCTGGATGATAGTACCCAACATCA
AGCAGAACCACTACACGGTGCACGGTCTGCAGAGCGGCACCAAGTACATCTTCATGGTCAAGGCCATCAA
CCAGGCGGGCAGCCGAGCAGTGAAGTGGGAAGTTGAAGACAAAACAGCCAACCTTTAAACTGGATCCC
AAATCTGCTCATCGAAAACCTGAAGGTGTCCATGATAACTTACAGTAGAACGTGATGAGTCATCATCCA
AGAAGAGTCACACACCTGAACGCTTCCAGCCAGGGGAGCTATGGAGTAGCTGGAATGTGTTTATTGA
TAGTGGCCGCATTATTGGGAAGTGGTCATAAGTGAAGCACATGGTGA
    
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**5' Read Nucleotide Sequence:**

>OriGene 5' read for NM\_033291 unedited

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NCCTGTGCGATTTTGTATACGACTCCTATAGGCGGCNCGGAATTCGCACGAGGCTCGAG
CAGAGTGGTGTAGCAACAGATCAAAGAAAAAGAGACGAAACGTGCTCTTTGCTGCCCC
TAGATTTCCGCGGGTTGCTTTTGTCTTGGCGGCTCCTGTGCGGTTCCGGTGTTCGCTCT
GAAGACTGCGACGCGGGCTCCGATGCAGCTCGTCCCTGCCGGATGGGTGATGGGATTCT
AAACATGAGGCAGATAGCTGATCAGCTTCTTGGGTTTTGCTGATGACACAAGAGAGCTT
TGCTGAAGATGGAACACTGGAGTCAGAACTGACCTGCCCTATTTGTCTGGAGCTCTTT
GAGGACCCTCTTACTGCCCTGCGCACACAGCCTCTGCTTCAACTGCGCCACCCGCATC
CTAGTATCACACTGTGCCACCAACGAGTCTGTGGAGTCCATCACCGCCTTCCAGTGCCCC
ACCTGCCGGCATGTCATCACCTCAGCCAGCGAGGTCTAGACGGGCTCAAGCGCAACGTC
ACCCTACAGAACATCATCGACAGGTTCCAGAAAGCATCAGTGAGCGGGCCCAACTCTCC
AGCGAGACCCGTCGGGAGCGGGCCTTTGACGCCAACACCATGACCTCCGCCGAGAAGGTC
CTCTGCCAGTTTTGTGACCAGGATCCTGCCAGGACGCTGTGAAGACCTGTGTCACTTGT
GAAGTATCCTACTGTGACGAGTGCCTGAAAGCCACTACCCGAATAAGAAGCCCTTTACA
GGCCATCGTCTGATTGAGCCAATTCCGGACTCTACATNCGNNGGCTGATGTGCTTGG
GCATGANNGATGAGAAGTGGAAATATGTAAGTGTGACCGATGACCAGTTAATCTGTGCC
CTGTGTAACCTGGNNTGGCGNACCCGATCATCAGG
    
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<b>3' Read Nucleotide Sequence:</b>	>OriGene 3' read for NM_033291 unedited ACTATGAACCGCGCCGAATCTAGAGTCGAGTTTTTTTTTTTTTTTTTTTTTTGGTCTTAACTCTATTGTAACATACTAGACTATAGAGGGACTTCTACATCTTTCAAGATGTGTTAATAAAGGTCTGTTTATAAATACTTTGAGGCATGAATCTAGCAAATAGTACTTTATACAATGTCCTTGTGATTACCAACTCATAAATATTAAGTGTTCAGTGACTTATGTTTGGATGTGGTAGTGCTGATCAGGGCCATGTGCTGATGTCCTGGAGAGCAAAATCAATCCAAAGTGGTGTGCTATTTGTGACAGAACATGTTTATTTACTCAGCCCCGAGACAAAAGGAAAAA TTGATATGGGGGAGCGGAAATAGGAGAATTAATGTAGTGAAGAAATTTACAGGTCTAAAGGAACTATTAAGGAAGGATAAAGTAGATTCTATACTATAAAACAGAATCTACTCTGATAAAAAGACAAATCAGCCTGAATTTTTGAATAATCAATAGGATTCAAAATGACTATTTTCAATTGCAATCTCATTCTTAATGTTCTTCCAGAACCCTTAACCCTGAGAGAAGCAGGGCAAAATGTGGCCAAAGGATTCAGAACCTTTCTTTCCAACATTATCCCATCAGTATGAAGAGTAAAGATTTAGCCACGGCAAGGTCGAGGTCCAAAATCAACTCTTTTCATTCTCTGTCTTGCTCTCCATTTAGTTGATCTGATACAACCTTTTGACATCACATTAACACTTCAATTATAACCCNAGTAAGAAGACTGTTTTCTNCCCTACTAAGTTCAACACATCCTGTTATGCCACTCGAGTGAGAAGACTACCCTGGGTCATCATGGGTATCAGGTAGAGATGAGTACATCCAACCTCAAATTTGTTTTTGTAGCCCCGATGTGATAAATAAAGTGAATA
<b>Restriction Sites:</b>	NotI-NotI
<b>ACCN:</b>	NM_033291
<b>Insert Size:</b>	3600 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>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>	<u><a href="#">NM_033291.1</a></u> , <u><a href="#">NP_150633.1</a></u>
<b>RefSeq Size:</b>	3352 bp
<b>RefSeq ORF:</b>	1659 bp
<b>Locus ID:</b>	4281
<b>Cytogenetics:</b>	Xp22.2
<b>Domains:</b>	zf-B_box, RING, BBC, FN3
<b>Protein Families:</b>	Druggable Genome
<b>Protein Pathways:</b>	Ubiquitin mediated proteolysis

**Gene Summary:**

The protein encoded by this gene is a member of the tripartite motif (TRIM) family, also known as the 'RING-B box-coiled coil' (RBCC) subgroup of RING finger proteins. The TRIM motif includes three zinc-binding domains, a RING, a B-box type 1 and a B-box type 2, and a coiled-coil region. This protein forms homodimers which associate with microtubules in the cytoplasm. The protein is likely involved in the formation of multiprotein structures acting as anchor points to microtubules. Mutations in this gene have been associated with the X-linked form of Opitz syndrome, which is characterized by midline abnormalities such as cleft lip, laryngeal cleft, heart defects, hypospadias, and agenesis of the corpus callosum. This gene was also the first example of a gene subject to X inactivation in human while escaping it in mouse. Alternative promoter use, alternative splicing and alternative polyadenylation result in multiple transcript variants that have different tissue specificities. [provided by RefSeq, Dec 2016]

Transcript Variant: Variant 2 (beta) uses an alternate splice site near the end of the coding region, introducing a frameshift and an earlier stop codon as compared to variant 1. The beta isoform is thus 115 aa shorter than isoform alpha.