

## Product datasheet for **SC306322**

### SMCR7 (MIEF2) (NM\_148886) Human Untagged Clone

#### Product data:

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| Product Type:        | Expression Plasmids                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| Product Name:        | SMCR7 (MIEF2) (NM_148886) Human Untagged Clone                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
| Tag:                 | Tag Free                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
| Symbol:              | SMCR7                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| Synonyms:            | COXPD49; MID49; SMCR7                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| Vector:              | <u>pCMV6 series</u>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| Fully Sequenced ORF: | <p>&gt;NCBI ORF sequence for NM_148886, the custom clone sequence may differ by one or more nucleotides</p> <pre> ATGGGGCTGAGTCCCAATTTAGACAGGCAGACCATGGCAGAGTTCTCCAGAAACGGGGG AAGCGGCGTAGCGACGAAGGGCTGGGCAGCATGGTGGACTTCTCCTGGCCAATGCCCCG CTGGTGTGGGCGTGGGCGGGGCTGCTGTGCTGGGCATTGCCACCCTGGCCGTGAAGCGG TTCATTGACAGGGCCACTAGCCCGCGGGATGAGGATGACACCAAGGCAGACAGCTGGAAG GAACTGAGCCTGCTCAAGGCCACACCACCTGCAGCCCCGGCCTCCACCTGCTGCCCTT AGCCAGCCAGTGTGCCCTTGGCCCCCTCGTCGTCTGCCCCAGAAGGGCCTGCAGAACT GATCCTGAGGTGACACCAGCTCAGCTCCCCAGCACCCTGTGTCTGACTGCAGGAG AGGCTGTGGCCTTCGAGCGGGACCGTGTGACCATCCCAGCAGCCAGGTGGCTTTGGCC AAACAGCTGGCTGGCGACATCGCCCTGGAGCTGCAGGCCTACTTTCGGAGCAAGTTCCTCG GAACTGCCCTTTGGGGCATTCTGTGCCTGGGGGGCCGCTCTACGACGGGCTGCAGGCGGGG GCTGCGGACCATGTGCGTCTCCTGGTGCCACTGGTGTGAGCCGGGCTGTGGAGCCTG GTGCCGGGCGTGGACACTGTGGCGAGGGACCCTCGCTGCTGGGCCGTGCGCAGGACGCAG CTTGAGTTCTGCCCCGTGGGAGCAGCCCTGGGACCGCTTCTGGTGGGGGCTACCTC TCCTCCCGCTCCTGCTGGAGCTACTCCGCAAGGCGCTGGCTGCTTCTGTCAACTGGCCG GCCATTGGCAGCCTTCTCGGGTGCTGATCCGGCCAGCATGGCCTCGGAGGAGCTGCTG CTCGAGGTGCAGCACGAACGCCTGGAGCTCACTGTGGCTGTGCTTGTGGCAGTCCCTGGG GTGCGATGCTGACGACCGCTCCTCTTGGCTGGCCCTGGAGGGGCTGGCGGGGAACCTC TGGCTGCAGGACCTGTATCCAGTGGAGGCTGCTAGGCTGCGAGCCCTGGACGACCATGAC GCTGGGACTCGCCGGCGGCTGCTGCTGCTGTGTGCTGTCTGCCGTGGTTGCTCGGCT CTGGGGCAGCTAGGCCGGGGTCACTGACCCAGGTGGTCTGCGTCTGGGGGAGGACAAC GTGGATTGGACGGAGGAGGCCTTGGGTGAGCGCTTCTGCAAGCCCTGGAGCTGCTCATC GGCAGCCTGGAGCAGGCCAGCCTGCCCTGCCACTTCAACCCAGCGTGAACCTCTTCAGC AGCTTGCGTGAGGAGGAGATTGACGACATTGGCTATGCGCTATACAGTGGCCTACAGGAG CCCAGGGGCTGCTCTAG </pre> |
| Restriction Sites:   | Please inquire                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
| ACCN:                | NM_148886                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |



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| <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 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.                                                                                                                                                                                                                                                                                                                                                                                                       |
| <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_148886.1</a></u> , <u><a href="#">NP_683684.2</a></u>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| <b>RefSeq Size:</b>           | 2458 bp                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| <b>RefSeq ORF:</b>            | 1398 bp                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| <b>Locus ID:</b>              | 125170                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| <b>UniProt ID:</b>            | <u><a href="#">Q96C03</a></u>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| <b>Cytogenetics:</b>          | 17p11.2                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| <b>Protein Families:</b>      | Transmembrane                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| <b>Gene Summary:</b>          | <p>This gene encodes an outer mitochondrial membrane protein that functions in the regulation of mitochondrial morphology. It can directly recruit the fission mediator dynamin-related protein 1 (Drp1) to the mitochondrial surface. The gene is located within the Smith-Magenis syndrome region on chromosome 17. Alternative splicing results in multiple transcript variants encoding different isoforms. [provided by RefSeq, Jun 2011]</p> <p>Transcript Variant: This variant (2) differs in the 5' UTR and uses a distinct translational start codon, compared to variant 1. The resulting isoform (2) is longer at the N-terminus, compared to isoform 1.</p> |