

## Product datasheet for SC113879

### MOSC2 (MARC2) (NM\_017898) Human Untagged Clone

#### Product data:

|                           |                                                                                         |
|---------------------------|-----------------------------------------------------------------------------------------|
| Product Type:             | Expression Plasmids                                                                     |
| Product Name:             | MOSC2 (MARC2) (NM_017898) Human Untagged Clone                                          |
| Tag:                      | Tag Free                                                                                |
| Symbol:                   | MOSC2                                                                                   |
| Synonyms:                 | MARC2; MOSC2                                                                            |
| Mammalian Cell Selection: | Neomycin                                                                                |
| Vector:                   | pCMV6-Entry (PS100001)                                                                  |
| E. coli Selection:        | Kanamycin (25 ug/mL)                                                                    |
| Fully Sequenced ORF:      | >SC113879 representing NM_017898.<br>Blue=Insert sequence Red=Cloning site Green=Tag(s) |

GCTCGTTTGTAGTAACCGTCAGAATTTTGTAAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTG  
 GATCCGGTACCGAGGAGATCTGCCGCC**CGCATCGCC**  
 ATGGGCGCTTCCAGCTCCTCCGCGCTGGCCCGCTCGGCCTCCAGCCCGGCCCTGGCCAGGTGGCTC  
 GGGGTCGCGCGCTAGGACTGGCCGCCGTGGCCCTGGGACTGTCGCCTGGCGCCGCGCATGGCCAGG  
 CGGCGCCGGCGGCTGCAGCAGGTGGGCACCGTGGCGAAGCTCTGGATCTACCCGGTGAAATCCTGCAAA  
 GGGGTGCCGTGAGCGAGGCTGAGTGCACGGCCATGGGCTGCGCAGCGGCAACCTGCGGGACAGGTTT  
 TGGCTGGTGATTAAGGAAGATGGACACATGGTCACTGCCCAGCAGGAGCCTCGCCTCGTGCTCATCTCC  
 ATCATTTATGAGAATAACTGCCTGATCTTCAGGGCTCCAGACATGGACCAGCTGGTTTTGCCTAGCAAG  
 CAGCCTTCCTCAAACAACTCCACAACGCAGGATATTTGGCCTTGACATTAAAGGCAGAGACTGTGGC  
 AATGAGGCAGCTAAGTGTTTCAACCACTCTTGAAAACTGAAGCGTATAGATTGGTTCAATTTGAGACA  
 AACATGAAGGGAAGAATCAAGAAAACTCTCCCACTCTTGATCAGAAATTTCCAGGTGGCCTACCCA  
 GACTACTGCCCGCTCCTGATCATGACAGATGCCTCCCTGGTAGATTTGAATACCAGGATGGAGAAGAAA  
 ATGAAATGGAGAATTTAGGCCAAATATTGTGGTGACCGGCTGTGATGCTTTTGAGGAGGATACCTGG  
 GATGAACCTCTAATTGGTAGTGTAGAAGTAAAAAGGTAATGGCATGCCCCAGGTGTATTTGACAACG  
 GTGGACCCAGACACTGGAGTCATAGACAGGAAACAGCCACTGGACACCCTGAAGAGCTACCGCCTGTG  
 GATCCTTCTGAGAGGGAATTGTACAAGTTGTCTCACTTTTTGGGATCTATTATTCAGTGAAAAAATT  
 GGAAGCCTGAGAGTTGGTGACCTGTGTATCGGATGGT**GTAG**  
**ACGCGT**ACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAATGATATCCTGGAT  
 TACAAGGATGACGACGATAAGGTTTAAACGGCCGGC

|                    |           |
|--------------------|-----------|
| Restriction Sites: | SgfI-MluI |
| ACCN:              | NM_017898 |
| Insert Size:       | 1008 bp   |


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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>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_017898.3</a></u>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| <b>RefSeq Size:</b>           | 1618 bp                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
| <b>RefSeq ORF:</b>            | 1008 bp                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
| <b>Locus ID:</b>              | 54996                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| <b>UniProt ID:</b>            | <u><a href="#">Q969Z3</a></u>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
| <b>Cytogenetics:</b>          | 1q41                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| <b>Domains:</b>               | MOSC                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| <b>Protein Families:</b>      | Transmembrane                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
| <b>MW:</b>                    | 38 kDa                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| <b>Gene Summary:</b>          | <p>The protein encoded by this gene is an enzyme found in the outer mitochondrial membrane that reduces N-hydroxylated substrates. The encoded protein uses molybdenum as a cofactor and cytochrome b5 type B and NADH cytochrome b5 reductase as accessory proteins. One type of substrate used is N-hydroxylated nucleotide base analogues, which can be toxic to a cell. Other substrates include N(omega)-hydroxy-L-arginine (NOHA) and amidoxime prodrugs, which are activated by the encoded enzyme. Multiple transcript variants encoding the different isoforms have been found for this gene. [provided by RefSeq, Sep 2016]</p> <p>Transcript Variant: This variant (2) differs in the 3' UTR compared to variant 1. Variants 1 and 2 both encode the same isoform (a).</p> |