

## Product datasheet for **SC109448**

### MOCS2 (NM\_004531) Human Untagged Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	MOCS2 (NM_004531) Human Untagged Clone
Tag:	Tag Free
Symbol:	MOCS2
Synonyms:	MCBPE; MOCO1; MOCODB; MPTS
Mammalian Cell Selection:	None
Vector:	<u><a href="#">pCMV6-XL5</a></u>
E. coli Selection:	Ampicillin (100 ug/mL)
Fully Sequenced ORF:	>OriGene ORF within SC109448 sequence for NM_004531 edited (data generated by NextGen Sequencing)

```
ATGTCGAGCTTGGAGATCAGCTCCTCGTGCTTCAGCCTGGAGACGAAATTGCCGTTATCC
CCCCATTAGTGGAGGATAGTGCTTTTGAGCCATCTAGGAAAGATATGGATGAAGTTGAA
GAGAAATCTAAAGATGTTATAAACTTTACTGCCGAGAACTTTCAGTAGATGAAGTCTCA
CAGTTGGTGATTCTCCGCTCTGTGGTGAATATCCCTATTTGTAGGGACTACAAGAAAT
AACTTTGAAGGGAAAAAAGTCATTAGCTTAGAATATGAAGCATATCTACCCATGGCGGAA
AATGAAGTCAGAAAGATTTGTAGTGACATTAGGCAGAAATGGCCAGTCAAACACATAGCA
GTGTTCCATAGACTTGGCTTGGTCCAGTGTGAGAAGCAAGCATAATCATTGCTGTGTCC
TCAGCCCACAGAGCTGCATCTCTTGAAGCTGTGAGCTATGCCATTGATACTTTAAAAGCC
AAGGTGCCCATATGGAAAAGGAAATATACGAAGAGTCATCAACTTGGAAAGGAAACAAA
GAGTGCTTTTGGGCATCCAACAGTTAA
```

Clone variation with respect to NM\_004531.3



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**5' Read Nucleotide Sequence:**

>OriGene 5' read for NM\_004531 unedited  
TATACGACTTACTATAGGGCGGCCGGAATTCGCACGAGGCTAGGCGGGATGGTGCCGC  
TGTGCCAGGTTGAAGTATTGTATTTTGCAAAAGTGCTGAAATAACAGGAGTTCGTTTCAGA  
GACCATTTCTGTGCCTCAAGAAATAAAAGCGTTGCAGCTGTGGAAGGAGATAGAACTCG  
ACATCCTGGATTGGCTGATGTTAGAAATCAGATAATATTTGCTGTTTCGTCAGAAATATGT  
CGAGCTTGGAGATCAGCTCCTCGTGCTTCAGCCTGGAGACGAAATTGCCGTTATCCCCC  
CATTAGTGGAGGATAGTGCTTTTGAGCCATCTAGGAAAGATATGGATGAAGTTGAAGAGA  
AATCTAAAGATGTTATAAACTTTACTGCCGAGAACTTTTCAGTAGATGAAGTCTCACAGT  
TGGTGATTTCTCCGCTCTGTGGTCAATATCCCTATTTGTAGGGACTACAAGAAATAACT  
TTGAAGGGAAAAAGTCATTAGCTTAGAATATGAAGCATATCTACCCATGGCGGAAAAATG  
AAGTCAGAAAGATTTGTAGTGACATTAGGCAGAAATGGCCAGTCAAACACATAGCAGTGT  
TCCATAGACTTGGCTTGGTTCCAGTGTGAGAAGCAAGCATAATCAGTTGCTGTGCTCCTCA  
GCCACAGAGCTGCATCTTGAAGCTGTGAGCTATGCCATTGATACTTTAAAAGCCAAG  
GTGCCATATGAAAAAGAAAAACGAAGAGTCACTCAACTTGGAAAGGAAACAAGAGTG  
CTTTTGGGCATNCACAGTAATCACTTATGTTTTTGAAGCATGCATCTTAACTTNTGTAA  
CTATTATTATTGATACATTNTGATTTTTTCTTCCATCAGGATAGTTACTGAAGCCATC  
TCTTATCTATGGGACAAGGGAGAAAAGAGCAGATAATGGGTTGTAGNATGAGGGT

**3' Read Nucleotide Sequence:**

>OriGene 3' read for NM\_004531 unedited  
CGCCGGCCCCGCCCCCATTTAACCATCCTGCNTTACCTTGCCCCGCGCCGCATTACAG  
ANCGGTTTTTTTTTTTTTTTTTTGACTTTTGAAACTGGGTTTTAGTTTATTATTTTTAAA  
TATTTCTGAAATGATAATCAAGACTGTCTGATAATGCTTTTTTAATACTTTCCAGTT  
CTGCCAACATTCTGTGCATCCTTAATAACAATGCTCTCCAGAACCGGGATGGGGG  
GCGGTGAGGTGGGTTGGTGGGGGAGTACGTCCCTGACTTATTCAACCCCTGTAGACGT  
TCCATACCTTATTGTTGTGTTCACTCTCTTTCCCAATCTTTTTTATCCGCCTTGCT  
ACCCCCATTATCCTCCTTTTCAATACGCTTATTGCTTCCCTTCCACTGTTTTTTCTTT  
CTATCCCATCTCCTTTTTAAATACCCCCCTATCCCACATCCCTCCTATTTTCGCT  
CCCTCTCCCTCTTTCCCTTCATCCCCCTCCCCATATCTCTCCCCCCCCCTTTTCCC  
TCTACTCCCCATCTACTCTTTCCCCCTTCCCTCACCATCCTTCTCCCCCCCCCAC  
CTCTTCCCTCTAACACCTACTTTCCCTTCTTCCCCCTCTTTTTTCCCCCTCCCC  
CTTTCTTTTACCCCCCTTTTCTTCTCTCCCCCTCCACTTCCACTCCCCCTCCCC  
CCCCCTCCTCACCCTTTTCTTCTTCTCCCCCTCCCTCCCTTTCCCCCTTTTCCCTC  
TCTCCCTTTTCGCTCTCTACCCACTCCCCCAACCTTTACCCTCCTCCCTTTC  
CCTCTTCCCACCCCTCCTTTCCCTTCCCTTCCCTTCCATCCCCCTCCCTCTTTCTC  
TTAACTCGTCCCCTTCTCTCAATCCTCTCCCAACCTCTACCGCTTCCCTAACTCC  
TTAGCG

**Restriction Sites:**

NotI-NotI

**ACCN:**

NM\_004531

**Insert Size:**

1140 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).

<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_004531.3</a> , <a href="#">NP_004522.1</a>
<b>RefSeq Size:</b>	1532 bp
<b>RefSeq ORF:</b>	567 bp
<b>Locus ID:</b>	4338
<b>UniProt ID:</b>	<a href="#">O96007</a>
<b>Cytogenetics:</b>	5q11.2
<b>Domains:</b>	MoaE
<b>Protein Families:</b>	Druggable Genome
<b>Gene Summary:</b>	<p>Eukaryotic molybdoenzymes use a unique molybdenum cofactor (MoCo) consisting of a pterin, termed molybdopterin, and the catalytically active metal molybdenum. MoCo is synthesized from precursor Z by the heterodimeric enzyme molybdopterin synthase. The large and small subunits of molybdopterin synthase are both encoded from this gene by overlapping open reading frames. The proteins were initially thought to be encoded from a bicistronic transcript. They are now thought to be encoded from monocistronic transcripts. Alternatively spliced transcripts have been found for this locus that encode the large and small subunits. [provided by RefSeq, Jul 2008]</p> <p>Transcript Variant: This variant (3) encodes the large subunit MOCS2B, also called MOCO1-B.</p> <p>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.</p>