

Product datasheet for **SC313500**

MRS2 (NM_020662) Human Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	MRS2 (NM_020662) Human Untagged Clone
Tag:	Tag Free
Symbol:	MRS2
Synonyms:	HPT; MRS2L
Mammalian Cell Selection:	None
Vector:	<u>pCMV6-XL5</u>
E. coli Selection:	Ampicillin (100 ug/mL)



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Fully Sequenced ORF:

>OriGene sequence for NM_020662 edited
 CCGGCATGAAGGTCTGGGGTCTGGCTGCCTGCTTCTTGTCTCCAGCACCATGGAATGC
 CTGCGCAGTTTACCCTGCCTCCTGCCCCGCGCGATGAGACTTCCCCGGCGGACGCTGTGT
 GCCCTGGCCTTGGACGTGACCTCTGTGGGTCTCCCGTTGCTGCTGCGGCCGCCGAGCC
 AACCTGATTGGAAGGAGCCGAGCGGCGCAGCTTTGCGGGCCGACCGGCTCCGCGTGGCA
 GGTGAAGTGCACCGTTTGAACCTCTGACGTCTCTCAAGCCACTTTAGCCAGTGTAGCC
 CCAGTATTTACTGTGACAAAATTTGACAAACAGGGAACGTTACTTCTTTTGAAGGAAG
 AAAACTGAATTATACCAAGAGTTAGGTCTTCAAGCCAGAGATTTGAGATTTACAGCATGTA
 ATGAGTATCACAGTCAGAAACAATAGGATTATCATGAGAATGGAGTATTTGAAAGCTGTG
 ATAACCTCAGAGTGTCTTCTGATATTAGATTATCGTAATTTAACTTAGAGCAATGGCTG
 TTCCGGGAACTCCCTTCACAGTTGTCTGGAGAGGGTCAACTCGTTACATACCCCTTACCT
 TTTGAGTTTAGAGCTATAGAAGCACTCTGCAATATTGGATCAACACCCTTCAGGGGAAA
 CTTAGCATTTTGCAGCCACTGATCCTTGAGACCTTGGATGCTTTGGTGGACCCCAACAT
 TCTTCTGTAGACAGAAGCAAACTGCACATTTTACTACAGAATGGCAAAAGTCTATCAGAG
 TTAGAAACAGATATTAATAATTTTCAAAGAGTCAATTTTGGAGATCTTGGATGAGGAAGAG
 TTGCTAGAAAGAGCTCTGTGTATCAAAATGGAGTGACCCACAAGTCTTTGAAAAGAGCAGT
 GCTGGGATTGACCATGCAGAAGAGATGGAGTTGCTGTTGGAAAACACTACCGATTGGCT
 GACGATCTCTCCAATGCAGCTCGTGAGCTTAGGGTGTGATTGATGATTCACAAAGTATT
 ATTTTCATTAATCTGGACAGCCACCGAAACGTGATGATGAGGTTGAATCTACAGCTGACC
 ATGGGAACCTTCTCTCTTTGCTCTTTGGACTAATGGGAGTTGCTTTTGGAAATGAATTTG
 GAATCTTCCCTTGAAGAGGACCATAGAATTTTGGCTGATTACAGGAATTATGTTTCATG
 GGAAGTGGCCTCATCTGGAGGCGCTGCTTTCATTCTTGGACGACAGCTAGAAGCTCCA
 TTGCCTCTATGATGGCTTCTTTACCTAAAAAGACTCTTCTGGCAGATAGAAGCATGGAA
 TTGAAAAATAGCCTCAGACTGGATGGACTTGGATCAGGAAGGAGCATCCTAACAAACCGT
 TAGGAACARSSCSGTGGATACTGAAGTTTTTTTTTWWTGGTAGTTACAGGAACTTCTGA
 TACTCTTTTTATTATTTTCTGTATAGAGTCAGACACTTGAAAAAACTAATGTTTGAAG
 ACAAAAAATTTTTGGCAGTCACAATACCAGAACTGGATTGCATTTCCAGAATTCTGAGTT
 AAAGAAACAAAGTATTTGCTTTGTAAAAGGCCAAAATTCTATTTCTACAACTTTAAAT
 GCTGTTTTTATAGATGTGATATGAGGCAACACAAGCACAGACAGTTGCATAGATTTTAAAT
 TTATACATATCAAGAAAAGTGCAATTTTCATGCTGAATGAAGCGTAGGAACCTTGACAAGCC
 CATAGGTAGCTATAGTTCTTTGTGAGTATAGGGAATTATGTTTCATGTGAATTTCTGATT
 CTCAGGTGACTAAAAAGCTAGCATTCTATGTATTAACCTTACAACAGACTCTGTAAGTTT
 GAGCTTTAAAAACCAAACTTTGACATAACCTTATTTCTTGATTTTGCCCCCTTTTTTTTA
 TAAAGGTGAATAAAAGAAATAATTTAAAAA

5' Read Nucleotide Sequence:

>OriGene 5' read for NM_020662 unedited
 TTTTGTATCCGACTCCTATAGGCGCGCGGATTCGGCAGGCGCGCATGAAGGTCTG
 GGGTCTGGCTGCTGCCTGCTTCTTGTCTCAGCACCATGGAATGCCTGCGCAGTTTACCCT
 GCCTCCTGCCCGCGCGATGAGACTTCCCCGGCGGACGCTGTGTGCCCTGGCCTTGGACG
 TGACCTCTGTGGTCTCCCGTTGCTGCTGCGGCCGCCGAGCCAACCTGATTGGAAGGA
 GCCGAGCGGCGCANCTTTCGGGGCCGACCGGCTCCGCGTGGCAGGTGAAGTGCACCGGT
 TTAGAACCTCTGACGTCTCTCAAGCCACTTTAGCCAGTGTAGCCCCAGTATTTACTGTGA
 CAAAATTTGACAAACAGGGAACGTTACTTCTTTTGAAGGAAGAAAACCTGAATTATACC
 AAGAGTTAGGTCTTCAAGCCAGAGATTTGAGATTTAGCATGTAATGAGTATCACAGTCA
 GAAACAATAGGATTATCATGAGAATGGAGTATTTGAAAGCTGTGATAACTCCAGAGTGTC
 TTCTGATATTAGATTATCGTAATTTAACTTAGAGCAATGGCTGTTCCGGGAACTCCCTT
 CACAGTTGTCTGGAGAGGGTCAACTCGTTACATACCCCTTACCTTTTGTGTTTAGAGCTA
 TAGAAGCACTCCTGCATATTGGATCAACACCCTTCAGGGAACTTAGCATTNTGCAGCCA
 CTGATCCTTGAGACCTTGGATGCTNTGGTGGACCCCAACATTCTTCTGTAGACAGAAGC
 AAAGTGCACATTNTACTACAGAATGGCAAAAGTCTATCAGAGTTAGAAACAGATATTA
 ATTTTCAAGAGTCATTNTNGGNAGATCTGGATGAAAGAAAGAGTGCTAGAAAAGCTCTGT
 GTATANAATN

3' Read Nucleotide Sequence:	>OriGene 3' read for NM_020662 unedited <pre> AATTTCTTGNCCGCGCCGCAATTTANGATCGAGNTTTTTTTTTTTTTTTTTTTTTT TTTAAATTTTTCTTTTATTACCTTTTATAAGGAAAGGGGCAATACAAGAAATAAG GTTATGTCAAAGTTTGGTTTTTAAAGCTCAAACCTACAGAGTCTGTTGTAAGTTAATAC ATAGAATGCTAGCTTTTTAGTCACCTGAGAATCAGGAATTTTTCATGAACATAATTCCT ATACTGACAAAGAACTATAGCTACCTATGGGCTTGTCAAGTTCCTACGCTTCATTGAGCA TGAAATTGCACCTTTTCTTGATATGTATAAATTTAAATCTATGCAACTGTCTGTGCTTGGG TTGCCTCATATCACATCTATAAAAAACAGCATTTAAAGTTTGTAGGAAATAGAATTTTGGC CTTTTACAAAGCAAATACTTTGTTTCTTTAACTCAAAATTCTGGAAATGCAATCCAGTTC TGGTATTGTGACTGCCAAATATTTTTGTCTTCAACATTAGTTTTTTTCAAGTGTCTGA CTCTATACAAGAAATAATAAAAAAGAGTATCAGAAGTTTCTGTAACCTACCATAAAAAA ACTTCAGTATCCACGGCGCTGTTCTAACGCTTTGTTAGGATGCTCCTTCTGATCCAAG TCCATCCAGTCTGAGGCTATTTTTCAATTCCATGCTTCTATCTGCCAGAAGAGCCTTTT AGGTAAAGAACCCTCATAGGAGGCAAGGGAGCTTCTACCTGTCTGCAAGAATGAAAGCA GCCGCTCAAATGAGCCACTTTCCATGACATAATTCTGGACTAGCCCAAAATTCTATGG TCCTTCAAGGGAAGACCAATTATCCAAAGCCCTCCCTTCCCAAAAGCACAGAACA AAGTCCCCTGGCCCCCGCAATTAACC </pre>
Restriction Sites:	Please inquire
ACCN:	NM_020662
Insert Size:	2000 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).
OTI Annotation:	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.
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).
Reconstitution Method:	1. Centrifuge at 5,000xg for 5min. 2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA. 3. Close the tube and incubate for 10 minutes at room temperature. 4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom. 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.
RefSeq:	<u>NM_020662.1</u> , <u>NP_065713.1</u>
RefSeq Size:	1993 bp
RefSeq ORF:	1332 bp
Locus ID:	57380
UniProt ID:	<u>Q9HD23</u>

Cytogenetics:	6p22.3
Domains:	CorA
Protein Families:	Transcription Factors, Transmembrane
Gene Summary:	Magnesium transporter that mediates the influx of magnesium into the mitochondrial matrix (PubMed:11401429, PubMed:18384665). Required for normal expression of the mitochondrial respiratory complex I subunits (PubMed:18384665).[UniProtKB/Swiss-Prot Function] Transcript Variant: This variant (2) lacks an exon and uses an alternate splice site, which results in an alternate in-frame segment in the 5' coding region, compared to variant 1. The encoded isoform (b) is shorter than isoform a. 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.