

Product datasheet for **RC238283**

MRS2 (NM_001286264) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	MRS2 (NM_001286264) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	MRS2
Synonyms:	HPT; MRS2L
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



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ORF Nucleotide Sequence:

>RC238283 representing NM_001286264
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGGATCGC**C

ATGGAATGCCTGCGCAGTTTACCCTGCCTCTGCCCGCGCGATGAGACTTCCCCGGCGGACGCTGTGTG
 CCCTGGCCTTGACGTGACCTCTGTGGTCTCCCGTTGCTGCCTGCGGCCGCCGAGCCAACCTGATTGG
 AAGGAGCCGAGCGGCGCAGCTTTGCGGGCCCGACCGGCTCCGCGTGGCAGGTGAAGTGCACCGGTTTGA
 ACCTCTGACGTCTCTCAAGCCACTTTAGCCAGTGTAGCCCCAGTATTTACTGTGACAAAATTTGACAAAC
 AGGGAACGTTACTTCTTTTAAAGGAAGAAAAGTGAATTATACCAAGAGTTAGGTCTTCAAGCCAGAGA
 TTTGAGATTTGAGCATGTAATGAGTATCACAGTCAGAAACAATAGGATTATCATGAGAATGGAGAAATAT
 TCTCTACTCTTGAATCAGTAGCTAGCATTCTTCAAAACAGTGTCTCTTTCATGGAGAGACAGACAGAGC
 AATGGCTGTTCCGGAACTCCCTTCACAGTTGTCTGGAGAGGGTCAACTCGTTACATACCCTTTACCTTT
 TGAGTTTAGAGCTATAGAAGCACTCCTGCAATATTGGATCAACACCTTCAGGGGAACTTAGCATTTTG
 CAGCCACTGATCCTTGAGACCTTGATGCTTTGGTGGACCCAAACATTCTTCTGTAGACAGAAGCAAAC
 TGCACATTTTACTACAGAATGGCAAAGTCTATCAGAGTTAGAAAAGATATTAATAATTTCAAAGAGTC
 AATTTTGGAGATCTTGATGAGGAAGAGTTGCTAGAAGAGCTCTGTGTATCAAAATGGAGTGACCCACAA
 GTCTTTGAAAAGAGCAGTGCTGGGATTGACCATGCAGAAGAGATGGAGTTGCTGTTGAAAACTACTACC
 GATTGGCTGACGATCTCTCCAATGCAGCTCGTGAGCTTAGGGTGTGATTGATGATTACAAAGTATTAT
 TTTCAATTAATCTGGACAGCCACCGAAACGTGATGATGAGGTTGAATCTACAGTGACCATGGGAACCTTC
 TCTCTTTCGCTCTTTGGACTAATGGGAGTTGCTTTTGAATGAATTTGAATCTTCCCTTGAAGAGGACC
 ATAGAATTTTTTGGCTGATTACAGGAATTATGTTATGGGAAGTGGCCTCATCTGGAGGCGCCTGCTTTC
 ATTCTTTGGACGACAGCTAGAAGCTCCATTGCCTCCTATGATGGCTTCTTTACCTAAAAAGACTCTTCTG
 GCAGATAGAAGCATGGAATTGAAAAATAGCCTCAGACTGGATGGACTTGGATCAGGAAGGAGCATCCTAA
 CAAACCGT

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence:

>RC238283 representing NM_001286264
 Red=Cloning site Green=Tags(s)

MECLRSLPCLLPAMRLPRRTLALALDVTSVGPVAAACGRRANLIGRSRAAQLCGPDRLRVAGEVHRFR
 TSDVSQATLASVAPVFTVTKFDKQGNVTSFERKKTEL YQELGLQARDLRFQHVMSITVRNNRIIMRMEKY
 SLLLESVASILQNSVSFMERQTEQWLFRELPSQLSGEGQLVTYPLPFEFRAIEALLQYWINTLQGLSIL
 QPLILETLDALVDPKHSSVDRSKLHILLQNGKSLSELETDIKIFKESILEILDEEELLEELCVSKWSDPQ
 VFEKSSAGIDHAEEMELLENYYRLADDLSNAARELRVLIDDSQSIIIFINLDSHRNVMMRLNLQLTMGTF
 SLSLFGLMGVAFGMNLESSLEEDHRIFWLITGIMFMGSLIWRRLLSFLGRQLEAPLPPMMASLPKKTLL
 ADRSMELKNSLRLDGLGSGRSILTNR

TRTRPLE**QKL**ISEEDLAANDILDYKDDDDKV

Restriction Sites:

Sgfl-MluI

Cloning Scheme:


ACCN: NM_001286264

ORF Size: 1338 bp

OTI Disclaimer: The molecular sequence of this clone aligns with the gene accession number as a point of reference only. However, individual transcript sequences of the same gene can differ through naturally occurring variations (e.g. polymorphisms), each with its own valid existence. This clone is substantially in agreement with the reference, but a complete review of all prevailing variants is recommended prior to use. [More info](#)

OTI Annotation: This clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene.

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.

Note: Plasmids are not sterile. For experiments where strict sterility is required, filtration with 0.22um filter is required.

RefSeq: [NM_001286264.1](#), [NP_001273193.1](#)

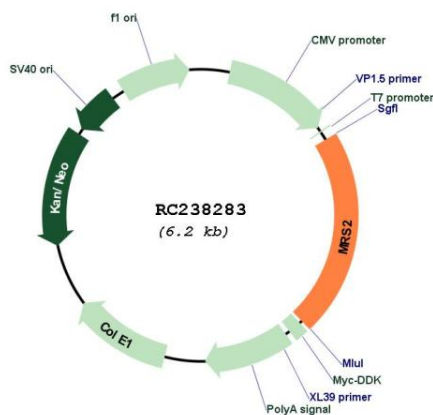
RefSeq Size: 3992 bp

RefSeq ORF: 1341 bp

Locus ID: 57380

UniProt ID:	<u>Q9HD23</u>
Cytogenetics:	6p22.3
Protein Families:	Transcription Factors, Transmembrane
MW:	51 kDa
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]

Product images:



Circular map for RC238283