

## Product datasheet for RC232010

### MSRB3 (NM\_001193461) Human Tagged ORF Clone

#### Product data:

Product Type: Expression Plasmids  
 Product Name: MSRB3 (NM\_001193461) Human Tagged ORF Clone  
 Tag: Myc-DDK  
 Symbol: MSRB3  
 Synonyms: DFNB74  
 Mammalian Cell Selection: Neomycin  
 Vector: pCMV6-Entry (PS100001)  
 E. coli Selection: Kanamycin (25 ug/mL)  
 ORF Nucleotide Sequence: >RC232010 ORF sequence  
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCC**CGATCGCC**

ATGTCTGCATTCAACCTGCTGCATTTGGTGACAAAGAGCCAGCCAGTAGCCCTTCGAGCCTGTGGGCTTC  
 CCTCAGGGTCGTGTAGGGATAAAAAGAACTGTAAGGTGGTCTTTCCAGCAGGAACTGAGGAAGCGGCT  
 AACACCCCTGCAGTACCATGTCACTCAGGAGAAAGGGACCGAAAGTGCCTTTGAAGGAGAATACACACAT  
 CACAAAGATCCTGGAATATAAATGTGTGTTTGTGGAAGTCCATTGTTAAGTCAGAAACCAATTTG  
 ACTCCGGTTCAGTTGGCCTTCATTCACGATGTGATCAATTCTGAGGCAATCACATTACAGATGACTT  
 TTCTATGGGATGCACAGGGTGGAAACAAGCTGCTCTCAGTGTGGTGCTCACCTTGGGCACATTTTGTAT  
 GATGGGCCTCGTCCAAGTGGGAAAAGATACTGCATAAATTCGGCTGCCTTGTCTTTACACCTGCGGATA  
 GCAGTGGCACCGCCGAGGGAGGCAGTGGGGTCGCCAGCCCGCCAGGCAGACAAAGCGGAGCTC

**ACGCGT**ACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAATGATATCCTGGATT  
 ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence: >RC232010 protein sequence  
 Red=Cloning site Green=Tags(s)

MSAFNLLHLVTKSQPVALRACGLPSGSCRDKKNCKVVFSQQELRKRLTPLQYHVTQEKGTESAFEGEYTH  
 HKDPGIYKCVVCGTPLFKSETKFDSGSGWPSFHDVINSEAITFTDDFSYGMHRVETSCSQCGAHLGHIFD  
 DGPRPTGKRYCINSAALSFTPADSSGTAEGGSGVASPAQADKAEL

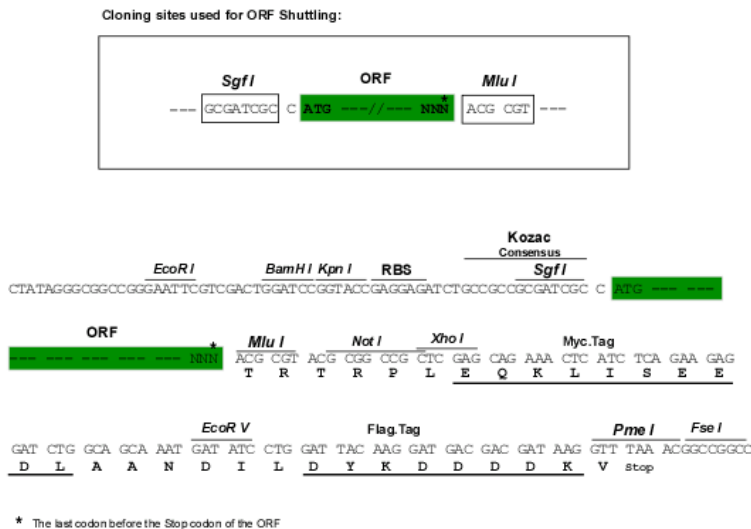
**TR**TRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: [https://cdn.origene.com/chromatograms/mk6347\\_c05.zip](https://cdn.origene.com/chromatograms/mk6347_c05.zip)



Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM\_001193461

ORF Size: 555 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.

RefSeq: [NM\\_001193461.1](#), [NP\\_001180390.1](#)

RefSeq Size: 4296 bp

RefSeq ORF: 558 bp

Locus ID: 253827

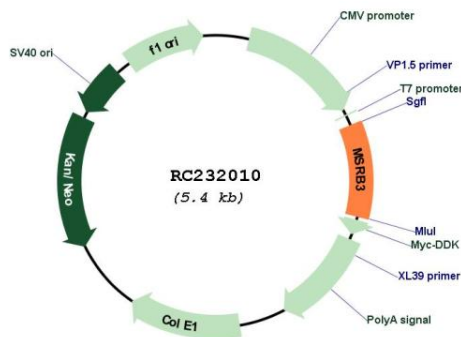
UniProt ID: [Q8IXL7](#)

**Cytogenetics:** 12q14.3

**MW:** 20 kDa

**Gene Summary:** The protein encoded by this gene catalyzes the reduction of methionine sulfoxide to methionine. This enzyme acts as a monomer and requires zinc as a cofactor. Several transcript variants encoding two different isoforms have been found for this gene. One of the isoforms localizes to mitochondria while the other localizes to endoplasmic reticula. [provided by RefSeq, Jul 2010]

**Product images:**



Circular map for RC232010