

Product datasheet for RC216512

MSRB3 (NM_198080) Human Tagged ORF Clone

Product data:

Product Type: Expression Plasmids
Product Name: MSRB3 (NM_198080) 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: >RC216512 representing NM_198080
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCCCGCATCGCC

ATGAGCCCGCGCGGACCCTCCCGCCCCCTCTCGCTTGCCTCTCCCTCTGCCTCTGCCTCTGCCTGG
 CCGCGCTCTGGGAAGTGCAGTCCGGTTCGTAGGGATAAAAAGAACTGTAAGGTGGTCTTTCCCA
 GCAGGAAGTGGGAAGCGGCTAACACCCCTGCAGTACCATGTCACTCAGGAGAAAGGGACCGAAAGTGCC
 TTTGAAGGAGAATACACACATCACAAAGATCCTGGAATATATAAATGTGTTGTTTGTGGAAGTCCATTGT
 TTAAGTCAGAAACCAATTTGACTCCGGTTCAGGTTGGCCTTCATTCCAGATGTGATCAATTCTGAGGC
 AATCACATTACAGATGACTTTTCTATGGGATGCACAGGGTGGAAACAAGCTGCCTCAGTGTGGTGTCT
 CACCTTGGGCACATTTTGTATGATGGGCCTCGTCCAAGTGGGAAAAGATACTGCATAAAATTCGGTGCCT
 TGTCTTTTACACCTGCGGATAGCAGTGGCACCCCGGAGGGAGGCAGTGGGGTCCGACGCCCGCCAGGC
 AGACAAAGCGGAGCTC

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence: >RC216512 representing NM_198080
 Red=Cloning site Green=Tags(s)

MSPRRTLPRPLSLCLSLCLCLLAAALGSAQSGSCRDKKNCKVVFSSQQLRKRLTPLYHVTQEKGTESA
 FEGEYTHHKDPGIYKCVVCGTPLFKSETKFDSSGSGWPSFHDVINSEAITFTDDFSYGMHRVETSCSQCGA
 HLGHIFFDDGPRPTGKRYCINSAALSFTPADSSGTAEGGSGVASPAQADKAEL

TRTRPLEQKLISEEDLAANDILDYKDDDDKV



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Chromatograms: https://cdn.origene.com/chromatograms/mk6122_e03.zip

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_198080

ORF Size: 576 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_198080.4](#)

RefSeq Size: 4242 bp

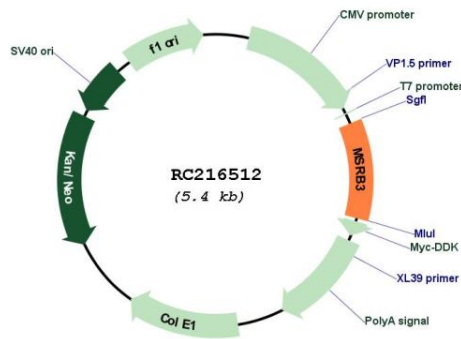
RefSeq ORF: 579 bp

Locus ID: 253827

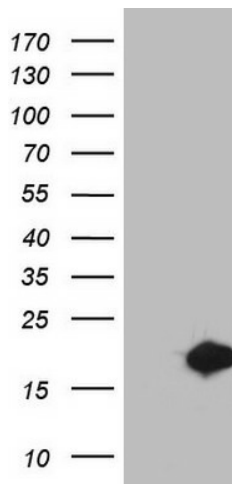
UniProt ID: [Q8IXL7](#)
 Cytogenetics: 12q14.3
 MW: 20.5 kDa

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]

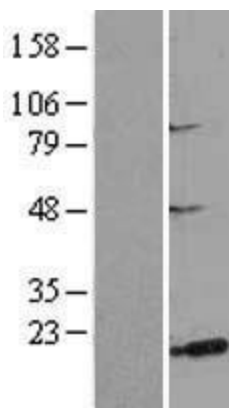
Product images:



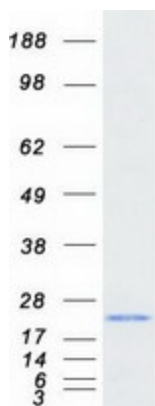
Circular map for RC216512



HEK293T cells were transfected with the pCMV6-ENTRY control (Cat# [PS100001], Left lane) or pCMV6-ENTRY MSRB3 (Cat# RC216512, Right lane) cDNA for 48 hrs and lysed. Equivalent amounts of cell lysates (5 ug per lane) were separated by SDS-PAGE and immunoblotted with anti-MSRB3(Cat# [TA803478]). Positive lysates [LY403694] (100ug) and [LC403694] (20ug) can be purchased separately from OriGene.



Western blot validation of overexpression lysate (Cat# [LY403694]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC216512 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified MSRB3 protein (Cat# [TP316512]). The protein was produced from HEK293T cells transfected with MSRB3 cDNA clone (Cat# RC216512) using MegaTran 2.0 (Cat# [TT210002]).