

Product datasheet for RC227449

Methionine Sulfoxide Reductase A (MSRA) (NM_001135670) Human Tagged ORF Clone

Product data:

Product Type: Expression Plasmids
Product Name: Methionine Sulfoxide Reductase A (MSRA) (NM_001135670) Human Tagged ORF Clone
Tag: Myc-DDK
Symbol: Methionine Sulfoxide Reductase A
Synonyms: PMSR
Mammalian Cell Selection: Neomycin
Vector: pCMV6-Entry (PS100001)
E. coli Selection: Kanamycin (25 ug/mL)
ORF Nucleotide Sequence: >RC227449 representing NM_001135670
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGATCGCC**

ATGCTCTCGGCCACCCGGAGGGCTTGCCAGCTCCTCCTCCACAGCCTCTTTCCCGTCCCAGGATGG
 GCAACTCGGCCTCGAACATCGTCAGCCCCAGGAGGCCTTGCCGGGCCGGAAGGAACAGACCCTGTAGC
 GGCCAAACATCATGTCAATGGCAACAGAACAGTCGAACCTTTCCAGAGGGAACACAGATGGCTGTATT
 GAAAAAAGTGGCCATGCAGAAGTCGTCGAGTGGTGTACCAGCCAGAACACATGAGTTTTGAGGAACTGC
 TCAAGGTCTTCTGGGAGAATCACGACCCGACCCAAGGTATGCGCCAGGGGAACGACCATGGCACTCAGTA
 CCGCTCGGCCATCTACCCGACCTCTGCCAAGCAAATGGAGGCAGCCCTGAGCTCCAAGAGAAGTACCAA
 AAGGTTCTTTAGAGCACGGCTTCGGCCCCATCACTACCGACATCCGGGAGGGACAGACTTTCTACTATG
 CGGAAGACTACCACCAGCAGTACCTGAGCAAGAACCCCAATGGCTACTGCGGCCTTGGGGCACCCGGCGT
 GTCCTGCCAGTGGGTATTA

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence: >RC227449 representing NM_001135670
 Red=Cloning site Green=Tags(s)

MLSATRRACQLLLLHSLFPVPRMGNSASNI VSPQEALPGRKEQTPVAAKHHVNGNRTVEPFPEGTQMAVF
 EKTGHAEVVRVVYQPEHMSFEELLKVFENHDPTQGMRQGNHGTQYRSAIYPTSAKQMEALSSKENYQ
 KVLSEHGFGPITTDIREGQTFYYAEDYHQYLSKNPNGYCGLGGTGVSCPVGIIK

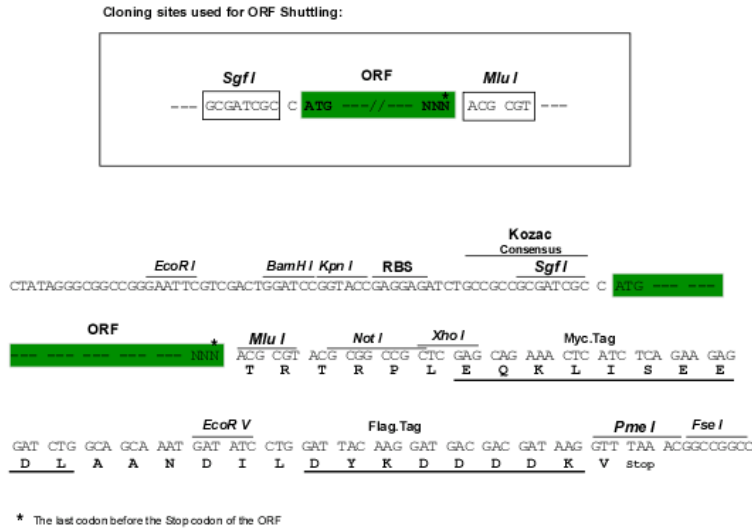
TRTRPLEQKLISEEDLAANDILDYKDDDDKV



Chromatograms: https://cdn.origene.com/chromatograms/mg3830_e01.zip

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_001135670

ORF Size: 585 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_001135670.3](#)

RefSeq ORF: 588 bp

Locus ID: 4482

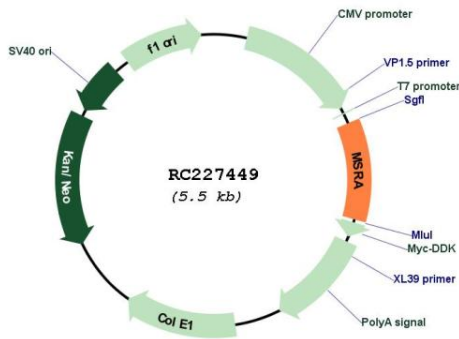
UniProt ID: [Q9UJ68](#)

Cytogenetics: 8p23.1

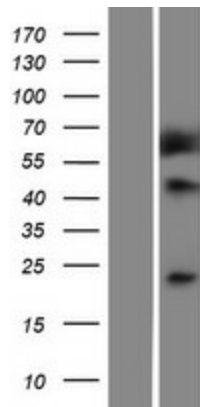
MW: 21.6 kDa

Gene Summary: This gene encodes a ubiquitous and highly conserved protein that carries out the enzymatic reduction of methionine sulfoxide to methionine. Human and animal studies have shown the highest levels of expression in kidney and nervous tissue. The protein functions in the repair of oxidatively damaged proteins to restore biological activity. Alternative splicing results in multiple transcript variants. [provided by RefSeq, May 2014]

Product images:



Circular map for RC227449



Western blot validation of overexpression lysate (Cat# [LY427660]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC227449 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).