

Product datasheet for **RG231941**

Methionine Sulfoxide Reductase A (MSRA) (NM_001199729) Human Tagged ORF Clone

Product data:

Product Type: Expression Plasmids
Product Name: Methionine Sulfoxide Reductase A (MSRA) (NM_001199729) Human Tagged ORF Clone
Tag: TurboGFP
Symbol: MSRA
Synonyms: PMSR
Mammalian Cell Selection: Neomycin
Vector: pCMV6-AC-GFP (PS100010)
E. coli Selection: Ampicillin (100 ug/mL)
ORF Nucleotide Sequence: >RG231941 representing NM_001199729
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGATCGCC**

ATGGCTGTATTTGGAATGGGATGTTTCTGGGGAGCTGAAAGGAAATTCGGGTCTTGAAAGGAGTGTATT
 CAACTCAAGTTGGTTTTGCAGGAGGCTATACTTCAAATCCTACTATAAAGAAAGTCTGCTCAGAAAAAC
 TGGCCATGCAGAAGTCGTCGAGTGGTGTACCAGCCAGAACACATGAGTTTTGAGGAACTGCTCAAGGTC
 TTCTGGGAGAATCACGACCCGACCAAGGTATGCGCCAGGGGAACGACCATGGCACTCAGTACCGCTCGG
 CCATCTACCCGACCTCTGCCAAGCAAATGGAGGCAGCCCTGAGCTCCAAAGAGAACTACCAAAGGTTCT
 TTCAGAGCACGGCTTCGGCCCCATCACTACCGACATCCGGGAGGGACAGACTTTCTACTATGCGGAAGAC
 TACCACCAGCAGTACCTGAGCAAGAACCCCAATGGCTACTGCGGCCTTGGGGCACCGGCGTGTCTCTGCC
 CAGTGGGTATTA

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

Protein Sequence: >RG231941 representing NM_001199729
 Red=Cloning site Green=Tags(s)

MAVFGMGCFWGAERKFWVLKGVYSTQVGFAGGYTSNPTYKEVCSEKTGHAEVVRVYQPEHMSFEELLKV
 FWENHDPTQGMRQGNHGTQYRSAIYPTSAKQMEAAALSSKENYQKVLSEHGFPIITTDIREGQTFYYAED
 YHQYLSKNPNGYCGLGGTGVSCPVGIIK

TRTRPLE - GFP Tag - V

Restriction Sites: SgfI-MluI

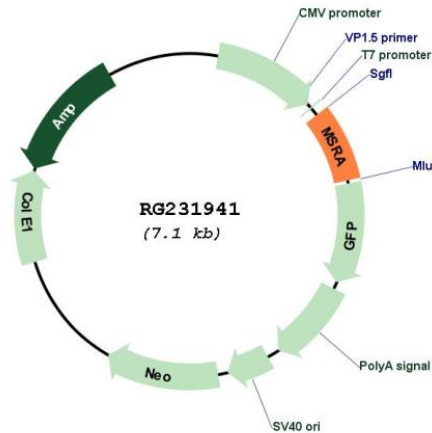


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Cloning Scheme:



Plasmid Map:



ACCN: NM_001199729

ORF Size: 507 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:	<ol style="list-style-type: none">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_001199729.3</u>
RefSeq Size:	1716 bp
RefSeq ORF:	510 bp
Locus ID:	4482
UniProt ID:	<u>Q9UJ68</u>
Cytogenetics:	8p23.1
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]