

## Product datasheet for **RG215002**

### MSRB2 (NM\_012228) Human Tagged ORF Clone

#### Product data:

**Product Type:** Expression Plasmids  
**Product Name:** MSRB2 (NM\_012228) Human Tagged ORF Clone  
**Tag:** TurboGFP  
**Symbol:** MSRB2  
**Synonyms:** CBS-1; CBS1; CGI-131; MSRB; PILB  
**Mammalian Cell Selection:** Neomycin  
**Vector:** pCMV6-AC-GFP (PS100010)  
**E. coli Selection:** Ampicillin (100 ug/mL)  
**ORF Nucleotide Sequence:** >RG215002 representing NM\_012228  
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAAACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCCCGATCGCC

ATGGGAGCAGGGGAGAGACGGGCAGAGGGCAGAGGGCGGCAGCGCCGGAGCGGCGTCATGGCCGGCTCC  
TCTGGTTGCTCCGGGGCCTGACCCTCGGAACGCGCCTCGGCGGGCGGTGCGGGGCAAGCGGGCGGCGG  
CGGGCCCGGCACCGCGGGGATCGTGGGGAGGCAGGGTCTCTTGCAACGTGTGAGCTGCCTCTTGCCAAG  
AGTGAGTGGCAAAAGAACTAACCCGAGCAGTTCTACGTACAAGAGAAAAGGAACGGAACCGCCTT  
TCAGTGGGATCTACCTGAATAACAAGGAAGCAGGAATGTATCATTGCGTGTGCTGCGACAGTCCACTCTT  
CAGTTCTGAGAAAAAGTACTGCTCTGGCACTGGGTGGCCTTCGTTTTCTGAGGCTCATGGTACGTCTGGC  
TCTGATGAAAGCCACACAGGGATCCTGAGACGTCTGGATACCTCGTTAGGATCAGCTCGCACAGAGGTTG  
TCTGCAAGCAGTGTGAAGCTCATCTAGGTACGTGTTTCTGATGGACCTGGGCCCAATGGTCAGAGGTT  
TTGCATCAACAGTGTGGCTTTGAAGTTCAAACCAAGGAAACAC

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

**Protein Sequence:** >RG215002 representing NM\_012228  
Red=Cloning site Green=Tags(s)

MGAGAETGRGQRAAAPERRHGRLLWLLRGLTLGTAPRRAVRGQAGGGPGTAGIVGEAGSLATCELPLAK  
 SEWQKKLTPEQFYVTREKGTPEPFSGIYLNKEAGMYHCVCCDSPLFSSEKKYCSGTGWPSFSEAHGTSG  
 SDESHTGILRRDLTSLGSARTEVVCKQCEAHLGHVFPDGPNGQRFNCINSVALKFKPRKH

TRTRPLE - GFP Tag - V

**Restriction Sites:** SgfI-MluI



[View online »](#)

**Cloning Scheme:**


**ACCN:** NM\_012228

**ORF Size:** 603 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\\_012228.2](#), [NP\\_036360.2](#)

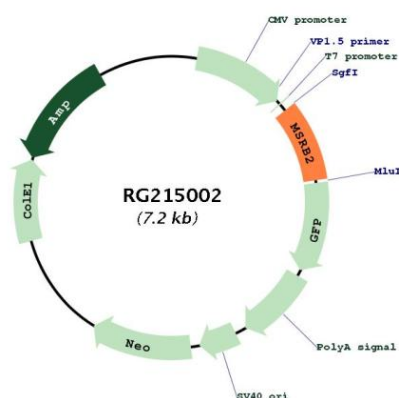
**RefSeq Size:** 903 bp

**RefSeq ORF:** 549 bp

**Locus ID:** 22921

UniProt ID:	<u><a href="#">Q9Y3D2</a></u>
Cytogenetics:	10p12.2
Domains:	SelR
Protein Families:	Transcription Factors
Gene Summary:	Methionine-sulfoxide reductase that specifically reduces methionine (R)-sulfoxide back to methionine. While in many cases, methionine oxidation is the result of random oxidation following oxidative stress, methionine oxidation is also a post-translational modification that takes place on specific residue. Upon oxidative stress, may play a role in the preservation of mitochondrial integrity by decreasing the intracellular reactive oxygen species build-up through its scavenging role, hence contributing to cell survival and protein maintenance. [UniProtKB/Swiss-Prot Function]

## Product images:



Circular map for RG215002