

# Peptide methionine sulfoxide reductase B1, chloroplastic (MSRB1), Recombinant Protein

**Cat** RP05113

**Size** 0.02 mg (E-Coli)/ 0.1 mg (E-Coli)/ 0.02 mg (Yeast)/ 0.1 mg (Yeast)/ 0.02 mg (Baculovirus)/ 0.02 mg (Mammalian-Cell)/ 1

**Species** mg (E-Coli)/ 0.1 mg (Baculovirus)/ 1 mg (Yeast)/ 0.1 mg (Mammalian-Cell)/ 1 mg (Baculovirus)/ 0.5 mg (Mammalian-Cell)/ 1 mg (Arabidopsis thaliana (Mouse-ear cress))

## Full Product Name

Recombinant Arabidopsis thaliana Peptide methionine sulfoxide reductase B1, chloroplastic (MSRB1)

## Product Gene Name

MSRB1 recombinant protein

## Product Synonym Gene Name

MSRB1

## Purity

Greater or equal to 85% purity as determined by SDS-PAGE. (lot specific)

## Sequence

EAEKNEFASL SENEWKKRLT PEQYYITRQK GTERAFTGEY WNSKTPGVYN CVCCDTPLFD SSTKFDSGTG  
WPSYYQPIGN NVKTKLDLSI IFMPRQEVCV AVCNAHLGHV FDDGPRPTGK RYCLNSAALK LNALEKTRD

## Sequence Positions

64-202, Full length protein

## Format

Lyophilized or liquid (Format to be determined during the manufacturing process)

## Host

E Coli or Yeast or Baculovirus or Mammalian Cell

## Molecular Weight

21,855 Da

## Storage

Store at -20°C. For long-term storage, store at -20°C or -80°C. Store working aliquots at 4°C for up to one week. Repeated freezing and thawing is not recommended.

## Protein Family

Peptide methionine sulfoxide reductase

## NCBI Accession #

NP\_001117484.1

## NCBI GI #

186490751

## NCBI GenBank Nucleotide #

NM\_001124012.1

## NCBI GenelD

**FOR RESEARCH OR FURTHER MANUFACTURING USE ONLY**

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841804 mg (E-Coli)/ 0.1 mg (Baculovirus)/ 1 mg (Yeast)/ 0.1 mg

**NCBI Official Full Name**  
(Mammalian-Cell)/ 1 mg (Baculovirus)/ 0.5 mg (Mammalian-Cell)

methionine sulfoxide reductase B 1

## NCBI Official Symbol

MSRB1

## NCBI Official Synonym Symbols

ATMSRB1; F22G10.17; F22G10\_17; methionine sulfoxide reductase B 1

## NCBI Protein Information

methionine sulfoxide reductase B 1

## UniProt Gene Name

MSRB1

## UniProt Synonym Gene Names

AtMSRB1

## UniProt Protein Name

Peptide methionine sulfoxide reductase B1, chloroplastic

## UniProt Synonym Protein Names

Peptide-methionine (R)-S-oxide reductase

## UniProt Primary Accession #

Q9C8M2

## UniProt Secondary Accession #

Q8LAR2; A6QRB3

## UniProt Related Accession #

Q9C8M2

## UniProt Comments

Catalyzes the reduction of methionine sulfoxide (MetSO) to methionine in proteins. Specifically reduces the MetSO R-enantiomer. Plays a protective role against oxidative stress by restoring activity to proteins that have been inactivated by methionine oxidation. May play an essential function in association with MSRB2 in maintaining vegetative growth during environmental constraints, through the preservation of photosynthetic antennae. MSRB1 and MSRB2 account for most of the leaf peptide MSR capacity.

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