

**MARS Antibody (C-term) Blocking Peptide**  
**Synthetic peptide**  
**Catalog # BP7844b****Specification**

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**MARS Antibody (C-term) Blocking Peptide - Product Information**Primary Accession [P56192](#)**MARS Antibody (C-term) Blocking Peptide - Additional Information****Gene ID** 4141**Other Names**

Methionine--tRNA ligase, cytoplasmic, Methionyl-tRNA synthetase, MetRS, MARS

**Target/Specificity**

The synthetic peptide sequence used to generate the antibody [AP7844b](/products/AP7844b) was selected from the C-term region of human MARS. A 10 to 100 fold molar excess to antibody is recommended. Precise conditions should be optimized for a particular assay.

**Format**

Peptides are lyophilized in a solid powder format. Peptides can be reconstituted in solution using the appropriate buffer as needed.

**Storage**

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C.

**Precautions**

This product is for research use only. Not for use in diagnostic or therapeutic procedures.

**MARS Antibody (C-term) Blocking Peptide - Protein Information****Name** MARS1 ([HGNC:6898](#))**Synonyms** MARS**Function**

Catalyzes the specific attachment of an amino acid to its cognate tRNA in a 2 step reaction: the amino acid (AA) is first activated by ATP to form AA-AMP and then transferred to the acceptor end of the tRNA (PubMed: [11714285](http://www.uniprot.org/citations/11714285)). Plays a role in the synthesis of ribosomal RNA in the nucleolus (PubMed: [10791971](http://www.uniprot.org/citations/10791971)).

**Cellular Location**

Cytoplasm, cytosol. Nucleus, nucleolus. Note=Localizes to the nucleolus in proliferative cells but disappears in quiescent cells

## **MARS Antibody (C-term) Blocking Peptide - Protocols**

Provided below are standard protocols that you may find useful for product applications.

- [Blocking Peptides](#)

## **MARS Antibody (C-term) Blocking Peptide - Images**

## **MARS Antibody (C-term) Blocking Peptide - Background**

methionyl-tRNA synthetase belongs to the class I family of tRNA synthetases. It catalyzes the chemical reaction:  $\text{ATP} + \text{L-methionine} + \text{tRNA(Met)} = \text{AMP} + \text{diphosphate} + \text{L-methionyl-tRNA(Met)}$ .

## **MARS Antibody (C-term) Blocking Peptide - References**

Kaminska, M., Biochemistry 40 (47), 14309-14316 (2001) Kang, J., J. Biol. Chem. 275 (41), 31682-31688 (2000) Ko, Y.G., J. Cell Biol. 149 (3), 567-574 (2000) Quevillon, S., J. Mol. Biol. 285 (1), 183-195 (1999)