

**MARS Antibody (C-term)**  
**Purified Rabbit Polyclonal Antibody (Pab)**  
**Catalog # AP7844b****Specification**

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**MARS Antibody (C-term) - Product Information**

Application	WB, IHC-P,E
Primary Accession	<a href="#">P56192</a>
Reactivity	Human
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Calculated MW	101116
Antigen Region	872-899

**MARS Antibody (C-term) - Additional Information****Gene ID** 4141**Other Names**

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

**Target/Specificity**

This MARS antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 872-899 amino acids from the C-terminal region of human MARS.

**Dilution**

WB~~1:1000

IHC-P~~1:10~50

**Format**

Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is prepared by Saturated Ammonium Sulfate (SAS) precipitation followed by dialysis against PBS.

**Storage**

Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

**Precautions**

MARS Antibody (C-term) is for research use only and not for use in diagnostic or therapeutic procedures.

**MARS Antibody (C-term) - 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](#)). Plays a role in the synthesis of ribosomal RNA in the nucleolus (PubMed:[10791971](#)).

#### Cellular Location

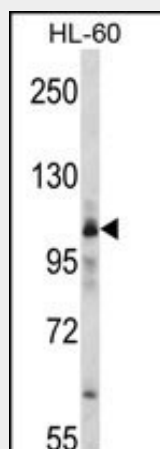
Cytoplasm, cytosol. Nucleus, nucleolus. Note=Localizes to the nucleolus in proliferative cells but disappears in quiescent cells

#### MARS Antibody (C-term) - Protocols

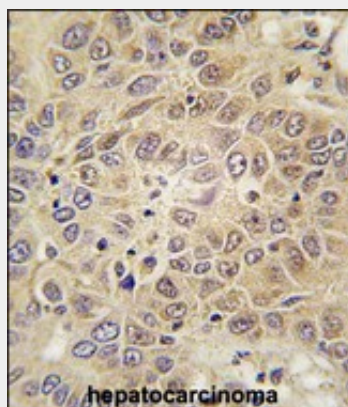
Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

#### MARS Antibody (C-term) - Images



Western blot analysis of MARS Antibody (C-term) (Cat. #AP7844b) in HL-60 cell line lysates (35ug/lane). cMARS (arrow) was detected using the purified Pab.



Formalin-fixed and paraffin-embedded human hepatocarcinoma tissue reacted with MARS antibody (C-term) (Cat.#AP7844b), which was peroxidase-conjugated to the secondary antibody, followed by DAB staining. This data demonstrates the use of this antibody for immunohistochemistry; clinical relevance has not been evaluated.

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

Methionyl-tRNA synthetase belongs to the class I family of tRNA synthetases. It catalyzes the chemical reaction:

ATP + L-methionine + tRNA(Met) = AMP + diphosphate + L-methionyl-tRNA(Met).

#### **MARS Antibody (C-term) - 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)