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MARS Antibody (C-term)

Purified Rabbit Polyclonal Antibody (Pab)

Catalog # AP7844b

Specification

MARS Antibody (C-term) - Product Information

Application	**WB, IHC-P,E**
Primary Accession	P56192
Reactivity	**Human**
Host	**Rabbit**
Clonality	**Polyclonal**
Isotype	**Rabbit Ig**
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

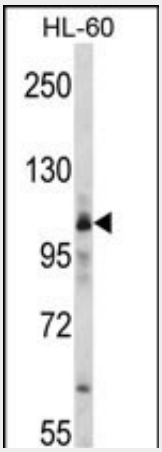
Target/Specificity
This MARS antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 872-899 amino acids from the C-terminal region of human MARS.

Dilution
WB~~1:1000
IHC-P~~1:10~50

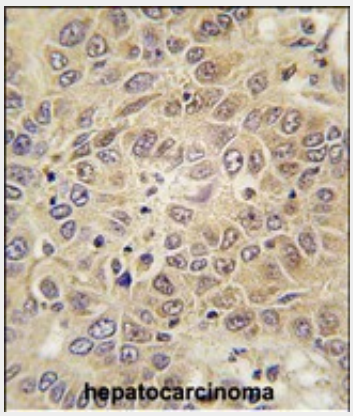
Format
Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is prepared by Saturated Ammonium Sulfate (SAS) precipitation followed by dialysis against PBS.

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.



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

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 Cytomety
- Cell Culture

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)