

**KD-Validated Anti-MARS1 Rabbit Monoclonal Antibody**  
**Rabbit monoclonal antibody**  
**Catalog # AGI2205****Specification****KD-Validated Anti-MARS1 Rabbit Monoclonal Antibody - Product Information**

Application	WB, FC, ICC
Primary Accession	<a href="#">P56192</a>
Reactivity	Rat, Human
Clonality	Monoclonal
Isotype	Rabbit IgG
Calculated MW	Predicted, 101 kDa; observed, 95 kDa KDa
Gene Name	<b>MARS1</b>
Aliases	<b>MARS1; Methionyl-TRNA Synthetase 1; MetRS; Methionine--TRNA Ligase, Cytoplasmic; SPG70; CMT2U; MARS; Methionyl-TRNA Synthetase; EC 6.1.1.10; Methionine TRNA Ligase 1, Cytoplasmic; Cytosolic Methionyl-TRNA Synthetase; ILFS2; MTRNS; ILLD; TTD9; MRS</b>
Immunogen	<b>A synthesized peptide derived from human MARS</b>

**KD-Validated Anti-MARS1 Rabbit Monoclonal Antibody - Additional Information**

Gene ID	<b>4141</b>
<b>Other Names</b>	
Methionine--tRNA ligase, cytoplasmic, 6.1.1.10, Methionyl-tRNA synthetase, MetRS, MARS1 ( <a href="http://www.genenames.org/cgi-bin/gene_symbol_report?hgnc_id=6898" target="_blank">HGNC:6898</a> ), MARS	

**KD-Validated Anti-MARS1 Rabbit Monoclonal Antibody - 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**

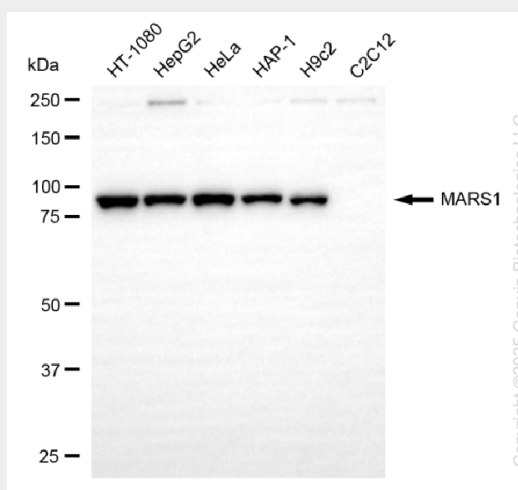
Cytoplasm, cytosol. Nucleus, nucleolus. Note=Localizes to the nucleolus in proliferative cells but disappears in quiescent cells

## KD-Validated Anti-MARS1 Rabbit Monoclonal Antibody - Protocols

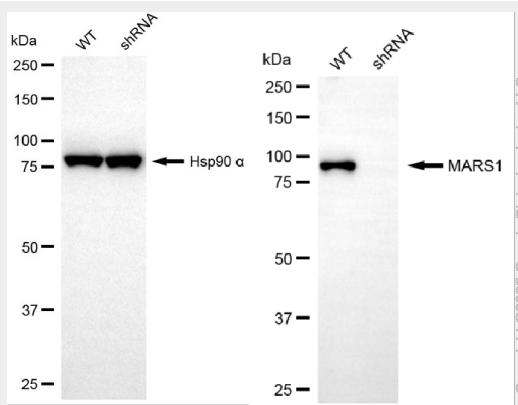
Provided below are standard protocols that you may find useful for product applications.

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

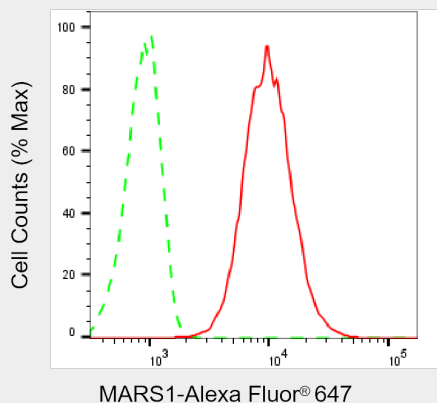
## KD-Validated Anti-MARS1 Rabbit Monoclonal Antibody - Images



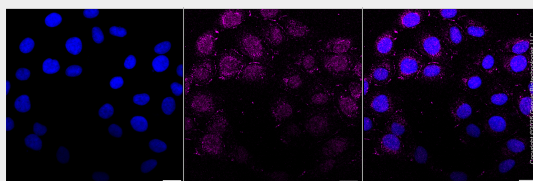
Western blotting analysis using anti-MARS1 antibody (Cat#AGI2205). Total cell lysates (30 µg) from various cell lines were loaded and separated by SDS-PAGE. The blot was incubated with anti-MARS1 antibody (Cat#AGI2205, 1:5,000) and HRP-conjugated goat anti-rabbit secondary antibody respectively.



Western blotting analysis using anti-MARS1 antibody (Cat#AGI2205). MARS1 expression in wild-type (WT) and MARS1 shRNA knockdown (KD) HeLa cells with 20 µg of total cell lysates. Hsp90 α serves as a loading control. The blot was incubated with anti-MARS1 antibody (Cat#AGI2205, 1:5,000) and HRP-conjugated goat anti-rabbit secondary antibody respectively.



Flow cytometric analysis of MARS1 expression in HT-1080 cells using anti-MARS1 antibody (Cat#AGI2205, 1:2,000). Green, isotype control; red, MARS1.



Immunocytochemical staining of HT-1080 cells with anti-MARS1 antibody (Cat#AGI2205, 1:1,000). Nuclei were stained blue with DAPI; MARS1 was stained magenta with Alexa Fluor® 647. Images were taken using Leica stellaris 5. Protein abundance based on laser Intensity and smart gain: Medium. Scale bar, 20 µm.