

MetRS Rabbit mAb

Catalog # AP75714

Product Information

Primary Accession	P56192
Host	Rabbit
Clonality	Monoclonal Antibody
Calculated MW	101116

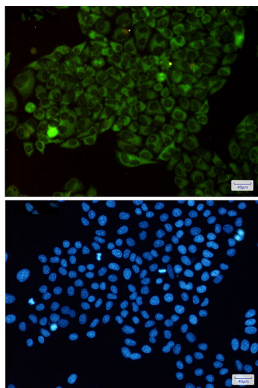
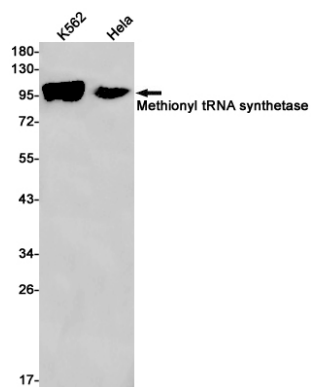
Additional Information

Gene ID	4141
Other Names	MARS1
Format	Liquid
Storage	Store at 4°C short term. Aliquot and store at -20°C long term. Avoid freeze/thaw cycles.

Protein Information

Name	MARS1 (HGNC:6898)
Synonyms	MARS
Function	Catalyzes the specific attachment of L-methionine 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 , PubMed: 33909043). Plays a role in the synthesis of ribosomal RNA in the nucleolus (PubMed: 10791971). In addition, can prevent the misincorporation of homocysteine into tRNA and protein by catalyzing a tRNA-independent hydrolysis of the misactivated homocysteinyl-AMP intermediate. The homocysteinyl-AMP intermediate undergoes an intramolecular cyclization reaction in which the thiolate side chain of homocysteine displaces the AMP group, forming homocysteine-thiolactone and AMP (By similarity).
Cellular Location	Cytoplasm, cytosol. Nucleus, nucleolus. Note=Localizes to the nucleolus in proliferative cells but disappears in quiescent cells

Images



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