

Multi-rAb® MARS Multi-Recombinant antibody

Catalog Number: RMX00063

Basic Information

Catalog Number:

RMX00063

Source:

Rabbit

Isotype:

IgG

GenBank Accession Number:

BC002384

GeneID (NCBI):

4141

UNIPROT ID:

P56192

Full Name:

methionyl-tRNA synthetase

Calculated MW:

101 kDa

Observed MW:

101 kDa

Purification Method:

N/A

Recommended Dilutions:

WB: 1:20000-1:100000

IHC: 1:200-1:800

IF/ICC: 1:50-1:500

Applications

Tested Applications:

WB, IHC, IF/ICC, ELISA

Species Specificity:

human, mouse, rat

Note-IHC: suggested antigen retrieval with TE buffer pH 9.0; (*) Alternatively, antigen retrieval may be performed with citrate buffer pH 6.0

Positive Controls:

WB: HeLa cells, HepG2 cells, mouse liver tissue, rat liver tissue

IHC: human colon tissue,

IF/ICC: HepG2 cells,

Background Information

The methionyl-tRNA synthetase (MARS) gene encodes cytoplasmic methionyl-tRNA synthetase (MetRS) responsible for catalyzing the ligation of methionine to tRNA. MetRS belongs to a family of aminoacyl-tRNA synthetases that play critical roles in protein biosynthesis by charging tRNAs with their cognate amino acids. MetRS overexpression was shown to be evident in human colon cancer patients. MetRS may thus be involved in oncogenic transformation. MetRS has been proven as a potential prognostic marker candidate for the clinical prognostic prediction of non-small-cell lung cancer (NSCLC) in patients. MetRS can also be used to detect intracellular oxidative stress and control protein synthesis under oxidative stress (PMID: 30271085, PMID: 34679529, PMID: 32404475). The calculated molecular weight of MetRS is 101 kDa.

Storage

Storage:

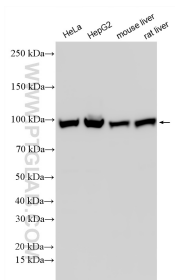
Store at -20°C. Stable for one year after shipment.

Storage Buffer:

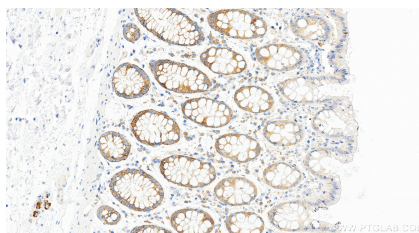
PBS with 0.02% sodium azide and 50% glycerol.

Aliquoting is unnecessary for -20°C storage

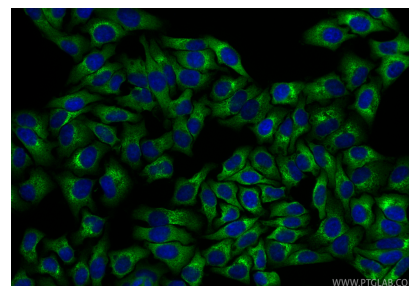
Selected Validation Data



Various lysates were subjected to SDS PAGE followed by western blot with RMX00063 (MARS antibody) at dilution of 1:50000 incubated at room temperature for 1.5 hours.



Immunohistochemical analysis of paraffin-embedded human colon tissue slide using RMX00063 (MARS antibody) at dilution of 1:400 (under 20x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Immunofluorescent analysis of (4% PFA) fixed HepG2 cells using MARS antibody (RMX00063) at dilution of 1:200 and CoraLite®488-Conjugated Goat Anti-Rabbit IgG(H+L) (SA00013-2).