

For Research Use Only

# MARS Recombinant antibody, PBS Only

Catalog Number: 83690-5-PBS



## Basic Information

Catalog Number:

83690-5-PBS

Size:

1 mg/ml

Source:

Rabbit

Isotype:

IgG

Immunogen Catalog Number:

AG6619

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:

Protein A purification

CloneNo.:

240648G3

## Applications

Tested Applications:

WB, IHC, IF/ICC, ELISA

Species Specificity:

human, mouse, rat

## 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 -80°C.

**The product is shipped with ice packs. Upon receipt, store it immediately at -80°C**

Storage Buffer:

PBS Only

For technical support and original validation data for this product please contact:

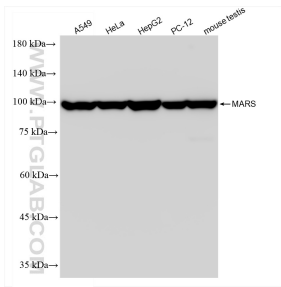
T: 4006900926

E: Proteintech-CN@ptglab.com

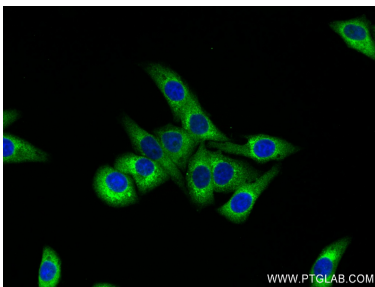
W: ptgcn.com

**This product is exclusively available under Proteintech Group brand and is not available to purchase from any other manufacturer.**

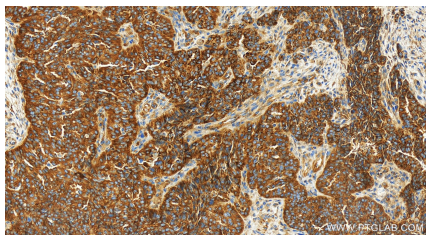
Selected Validation Data



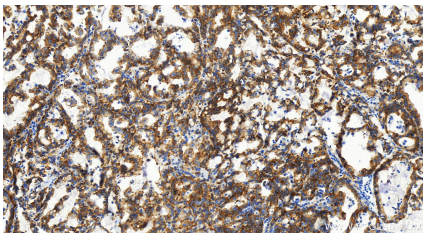
Various lysates were subjected to SDS PAGE followed by western blot with 83690-5-RR (MARS antibody) at dilution of 1:10000 incubated at room temperature for 1.5 hours. This data was developed using the same antibody clone with 83690-5-PBS in a different storage buffer formulation.



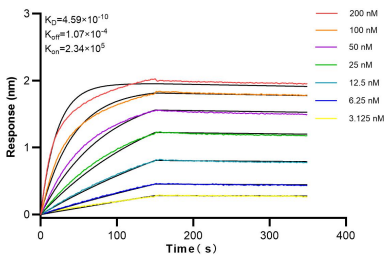
Immunofluorescent analysis of (4% PFA) fixed HepG2 cells using MARS antibody (83690-5-RR, Clone: 240648G3 ) at dilution of 1:250 and CoraLite®488-Conjugated AffiniPure Goat Anti-Rabbit IgG(H+L) (SA00013-2). This data was developed using the same antibody clone with 83690-5-PBS in a different storage buffer formulation.



Immunohistochemical analysis of paraffin-embedded human ovarian cancer slide using 83690-5-RR (MARS antibody) at dilution of 1:200 (under 20x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0). This data was developed using the same antibody clone with 83690-5-PBS in a different storage buffer formulation.



Immunohistochemical analysis of paraffin-embedded human stomach cancer tissue slide using 83690-5-RR (MARS antibody) at dilution of 1:200 (under 20x lens). Heat mediated antigen retrieval with Tris-EDTA buffer(pH9). This data was developed using the same antibody clone with 83690-5-PBS in a different storage buffer formulation.



Biolayer interferometry (BLI) kinetic assays of 83690-5-RR against Human MARS were performed. The affinity constant is 0.459 nM.