

For Research Use Only

MARS Recombinant antibody

Catalog Number:83690-4-RR



Basic Information

Catalog Number: 83690-4-RR	GenBank Accession Number: BC002384	Purification Method: Protein A purification
Size: 100ul , Concentration: 1000 ug/ml by Nanodrop;	GeneID (NCBI): 4141	CloneNo.: 240648G4
Source: Rabbit	UNIPROT ID: P56192	Recommended Dilutions: WB 1:2000-1:16000 IHC 1:50-1:500 IF/ICC 1:125-1:500
Isotype: IgG	Full Name: methionyl-tRNA synthetase	
Immunogen Catalog Number: AG6619	Calculated MW: 101 kDa	
	Observed MW: 101 kDa	

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, A549 cells, PC-12 cells, mouse testis tissue, rat liver tissue

IHC : human stomach cancer 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 pH 7.3.
Aliquoting is unnecessary for -20°C storage

*** 20ul sizes contain 0.1% BSA

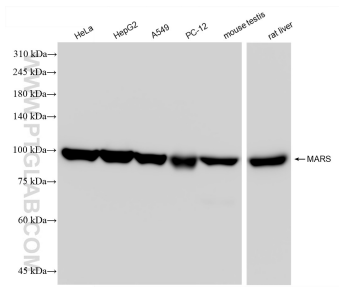
For technical support and original validation data for this product please contact:

T: 1 (888) 4PTGLAB (1-888-478-4522) (toll free in USA), or 1(312) 455-8498 (outside USA)

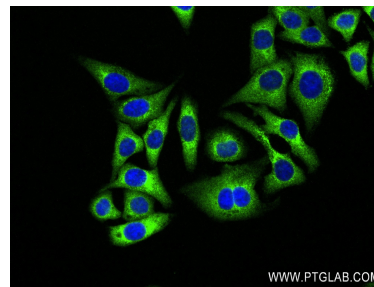
E: proteintech@ptglab.com
W: ptglab.com

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

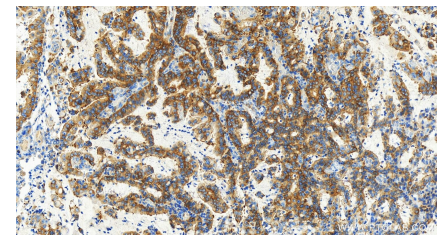
Selected Validation Data



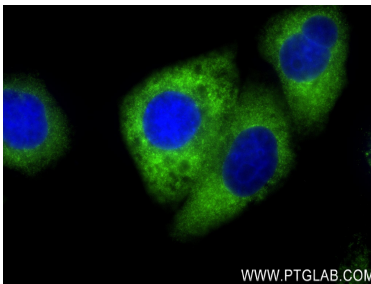
Various lysates were subjected to SDS PAGE followed by western blot with 83690-4-RR (MARS antibody) at dilution of 1:8000 incubated at room temperature for 1.5 hours.



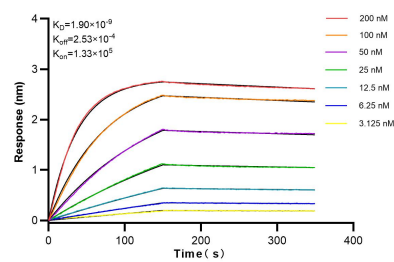
Immunofluorescent analysis of (4% PFA) fixed HepG2 cells using MARS antibody (83690-4-RR, Clone: 240648G4) at dilution of 1:250 and CoraLite®488-Conjugated AffiniPure Goat Anti-Rabbit IgG(H+L) (SA00013-2).



Immunohistochemical analysis of paraffin-embedded human stomach cancer tissue slide using 83690-4-RR (MARS antibody) at dilution of 1:200 (under 20x lens). Heat mediated antigen retrieval with Tris-EDTA buffer(pH9).



Immunofluorescent analysis of (4% PFA) fixed HepG2 cells using MARS antibody (83690-4-RR, Clone: 240648G4) at dilution of 1:250 and CoraLite®488-Conjugated AffiniPure Goat Anti-Rabbit IgG(H+L) (SA00013-2).



Biolayer interferometry (BLI) kinetic assays of 83690-4-RR against Human MARS were performed. The affinity constant is 1.90 nM.