

For Research Use Only

# HARS Recombinant antibody

Catalog Number: 83497-1-RR



## Basic Information

|  |   |   |
|--|---|---|
| <b>Catalog Number:</b><br>83497-1-RR                           | <b>GenBank Accession Number:</b><br>BC011807  | <b>Purification Method:</b><br>Protein A purification                                       |
| <b>Size:</b><br>100ul , Concentration: 1000 ug/ml by Nanodrop; | <b>GeneID (NCBI):</b><br>3035                 | <b>CloneNo.:</b><br>240495C1  |
| <b>Source:</b><br>Rabbit                                       | <b>UNIPROT ID:</b><br>P12081                  | <b>Recommended Dilutions:</b><br>WB 1:5000-1:50000<br>IHC 1:125-1:500<br>IF/ICC 1:125-1:500 |
| <b>Isotype:</b><br>IgG   | <b>Full Name:</b><br>histidyl-tRNA synthetase |   |
| <b>Immunogen Catalog Number:</b><br>AG9333                     | <b>Calculated MW:</b><br>509 aa, 57 kDa       |   |
|  | <b>Observed MW:</b><br>52 kDa                 |   |

## Applications

|  |   |
|--|---|
| <b>Tested Applications:</b><br>WB, IHC, IF/ICC, FC (Intra), ELISA  | <b>Positive Controls:</b><br>WB : HeLa cells, HEK-293 cells, HepG2 cells, K-562 cells<br>IHC : human intrahepatic cholangiocarcinoma tissue,<br>IF/ICC : MCF-7 cells, |
| <b>Species Specificity:</b><br>human   |   |
| <b>Note-IHC: suggested antigen retrieval with TE buffer pH 9.0; (*) Alternatively, antigen retrieval may be performed with citrate buffer pH 6.0</b> |   |

## Background Information

HARS is a cytoplasmic enzyme that belongs to the class II family of aminoacyl-tRNA synthetases. The enzyme is responsible for the synthesis of histidyl-transfer RNA, which is essential for the incorporation of histidine into proteins. HARS is located in a head-to-head orientation with HARSL on chromosome five, where the homologous genes share a bidirectional promoter. The gene product is a frequent target of autoantibodies in the human autoimmune disease polymyositis/dermatomyositis.

## Storage

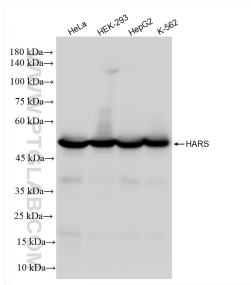
**Storage:**  
Store at -20°C. Stable for one year after shipment.  
**Storage Buffer:**  
PBS with 0.02% sodium azide and 50% glycerol pH 7.3.  
**Aliquoting is unnecessary for -20°C storage**

\*\*\* 20ul sizes contain 0.1% BSA

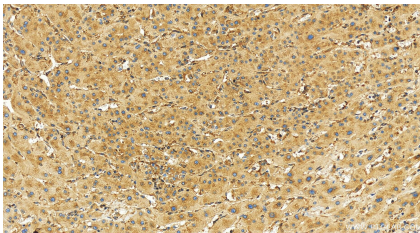
For technical support and original validation data for this product please contact:  
T: 1 (888) 4PTGLAB (1-888-478-4522) (toll free in USA), or 1(312) 455-8498 (outside USA)  
E: proteintech@ptglab.com  
W: ptglab.com

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

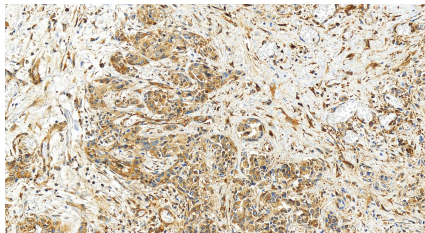
Selected Validation Data



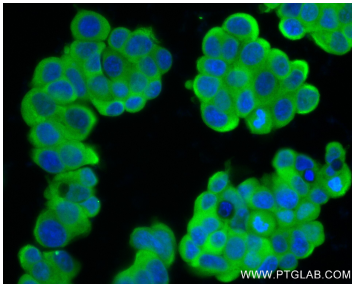
Various lysates were subjected to SDS PAGE followed by western blot with 83497-1-RR (HARS antibody) at dilution of 1:10000 incubated at room temperature for 1.5 hours.



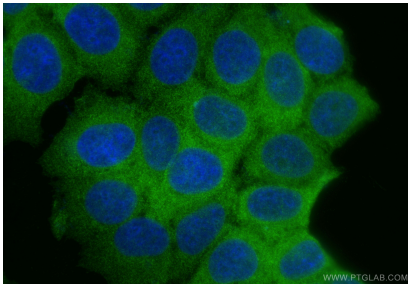
Immunohistochemical analysis of paraffin-embedded human intrahepatic cholangiocarcinoma tissue slide using 83497-1-RR (HARS antibody) at dilution of 1:250 (under 20x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



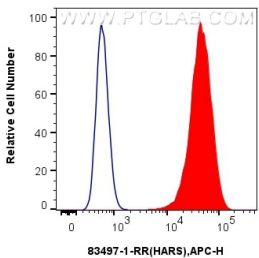
Immunohistochemical analysis of paraffin-embedded human intrahepatic cholangiocarcinoma tissue slide using 83497-1-RR (HARS antibody) at dilution of 1:250 (under 20x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



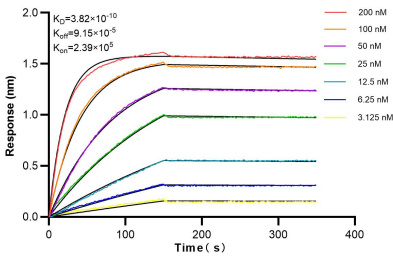
Immunofluorescent analysis of (4% PFA) fixed MCF-7 cells using HARS antibody (83497-1-RR, Clone: 240495C1 ) at dilution of 1:250 and CoraLite®488-Conjugated AffiniPure Goat Anti-Rabbit IgG(H+L) (SA00013-2).



Immunofluorescent analysis of (4% PFA) fixed MCF-7 cells using HARS antibody (83497-1-RR, Clone: 240495C1 ) at dilution of 1:1000 and CoraLite®488-Conjugated Goat Anti-Rabbit IgG(H+L) (SA00013-2).



1x10<sup>6</sup> MCF-7 cells were intracellularly stained with 0.25 ug HARS Recombinant antibody (83497-1-RR, Clone:240495C1) and APC-Conjugated AffiniPure Goat Anti-Rabbit IgG(H+L)(red), or 0.25 ug Isotype Control (blue). Cells were fixed with 4% PFA and permeabilized with Flow Cytometry Perm Buffer (PF00011-C).



Biolayer interferometry (BLI) kinetic assays of 83497-1-RR against Human HARS were performed. The affinity constant is 0.382 nM.