For Research Use Only

## HARS Recombinant antibody, PBS Only (Capture)

Catalog Number:83497-1-PBS



**Purification Method:** 

Protein A purification

CloneNo.:

240495C1

**Basic Information** 

Catalog Number: GenBank Accession Number:

83497-1-PBS BC011807 Size: GeneID (NCBI): 1000 μ g/ml 3035

Source: UNIPROT ID:
Rabbit P12081
Isotype: Full Name:

IgG histidyl-tRNA synthetase

Immunogen Catalog Number:Calculated MW:AG9333509 aa, 57 kDa

Observed MW: 52 kDa

**Applications** 

**Tested Applications:** 

WB, IHC, IF/ICC, FC (Intra), Cytometric bead array, Sandwich ELISA, Indirect ELISA, Sample test

Species Specificity:

human

**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

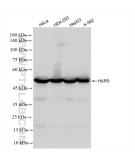
Storage:

Store at -80°C.

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

Storage Buffer: PBS Only

## Selected Validation Data



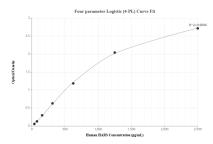
Various lysates were subjected to SDS PAGE followed by western blot with 83497-1-RR (HARS antibody) at dilution of 1:10000 incubated at room temperature for 1.5 hours. This data was developed using the same antibody clone with 83497-1-PBS in a different storage buffer formulation.



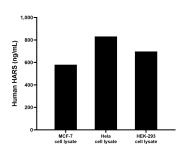
Immunohistochemical analysis of paraffinembedded human intrahepatic cholangiocarcinoma tissue slide using 83497-1-RR (HARS antibody) at dilution of 1:250 (under 20x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0). This data was developed using the same antibody clone with 83497-1-PBS in a different storage buffer formulation.



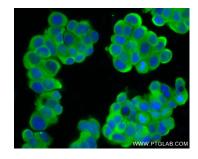
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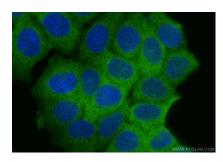
Sandwich ELISA standard curve of MP00486-1, Human HARS Recombinant Matched Antibody Pair-PBS only. 83497-1-PBS was coated to a plate as the capture antibody and incubated with serial dilutions of standard Ag9333. 83497-2-PBS was HRP conjugated as the detection antibody. Range: 39.1-2500 pg/mL



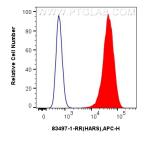
MCF-7, Hela and HEK-293 cell lysates were measured. The human HARS concentration of detected samples was determined to be 579.62 ng/mL (based on a 4.3 mg/mL extract load) in MCF-7 cell lysate, 830.79 ng/mL (based on a 3.6 mg/mL extract load) in Hela cell lysate and 698.03 ng/mL (based on a 3.4 mg/mL extract load) in HEK-293 cell lysate.



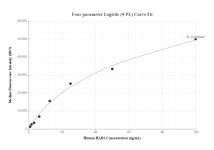
Immunofluorescent analysis of (4% PFA) fixed MCF-7 cells using HARS antibody (83497-1-RR, Clone: 240495C1) at dilution of 1:250 and CoraLite® 488-Conjugated AffiniPure Goat Anti-Rabbit IgG(H+L) (SA00013-2). This data was developed using the same antibody clone with 83497-1-PBS in a different storage buffer formulation.



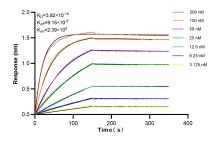
Immunofluorescent analysis of (4% PFA) fixed MCF-7 cells using HARS antibody (83497-1-RR, Clone: 240495C1) at dilution of 1:1000 and Coralite® 488-Conjugated Goat Anti-Rabbit IgG(H+L) (SA00013-2). This data was developed using the same antibody clone with 83497-1-PBS in a different storage buffer formulation.



1x10^6 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). This data was developed using the same antibody clone with 83497-1-PBS in a different storage buffer formulation.



Cytometric bead array standard curve of MP00486-1, HARS Recombinant Matched Antibody Pair, PBS Only. Capture antibody: 83497-1-PBS. Detection antibody: 83497-2-PBS. Standard: Ag9333. Range: 0.78-100 ng/mL



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