

For Research Use Only

HARS Recombinant antibody, PBS Only (Capture)

Catalog Number: 83497-1-PBS



Basic Information

Catalog Number: 83497-1-PBS	GenBank Accession Number: BC011807	Purification Method: Protein A purification
Size: 100ug , Concentration: 1 mg/ml by Nanodrop;	GeneID (NCBI): 3035	CloneNo.: 240495C1
Source: Rabbit	UNIPROT ID: P12081	
Isotype: IgG	Full Name: histidyl-tRNA synthetase	
Immunogen Catalog Number: AG9333	Calculated MW: 509 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

Product Information

83497-1-PBS targets HARS as part of a matched antibody pair:

MP00486-1: 83497-1-PBS capture and 83497-2-PBS detection (validated in Cytometric bead array, Sandwich ELISA)

Unconjugated rabbit recombinant monoclonal antibody in PBS only (BSA and azide free) storage buffer at a concentration of 1 mg/mL, ready for conjugation. Created using Proteintech's proprietary in-house recombinant technology. Recombinant production enables unrivalled batch-to-batch consistency, easy scale-up, and future security of supply.

This conjugation ready format makes antibodies ideal for use in many applications including: ELISAs, multiplex assays requiring matched pairs, mass cytometry, and multiplex imaging applications. Antibody use should be optimized by the end user for each application and assay.

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.

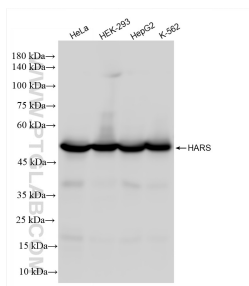
Storage

Storage:
Store at -80°C.
Storage Buffer:
PBS Only

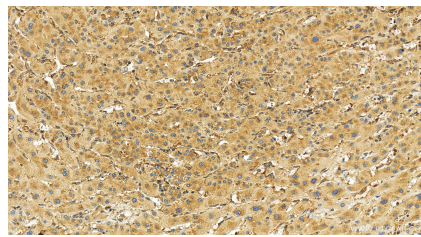
For technical support and original validation data for this product please contact:
T: 1 (888) 4PTGLAB (1-888-478-4522) (toll free in USA), or 1(312) 455-8498 (outside USA)
E: proteintech@ptglab.com
W: ptglab.com

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

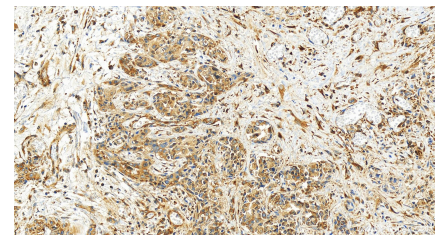
Selected Validation Data



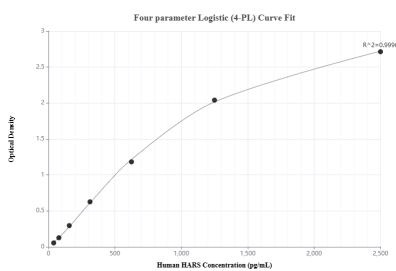
Various lysates were subjected to SDS PAGE followed by western blot with 83497-1-RR (HARS antibody) at dilution of 1:10000 incubated at room temperature for 1.5 hours. This data was developed using the same antibody clone with 83497-1-PBS in a different storage buffer formulation.



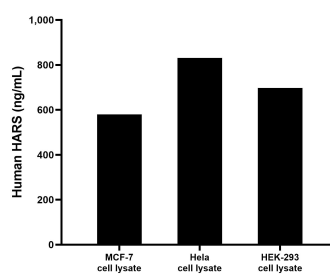
Immunohistochemical analysis of paraffin-embedded human intrahepatic cholangiocarcinoma tissue slide using 83497-1-RR (HARS antibody) at dilution of 1:250 (under 20x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0). This data was developed using the same antibody clone with 83497-1-PBS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



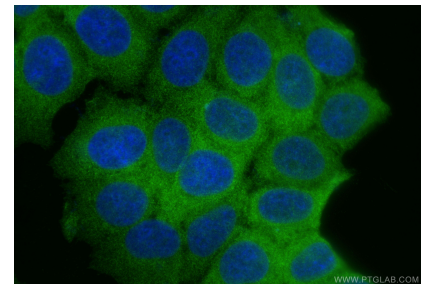
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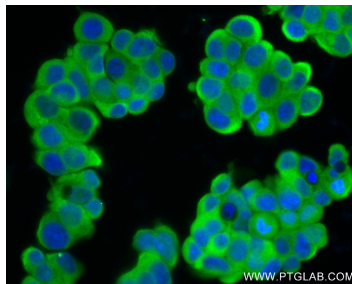
Sandwich ELISA standard curve of MP00486-1, Human HARS Recombinant Matched Antibody Pair - PBS only. 83497-1-PBS was coated to a plate as the capture antibody and incubated with serial dilutions of standard Ag9333. 83497-2-PBS was HRP conjugated as the detection antibody. Range: 39.1-2500 pg/mL



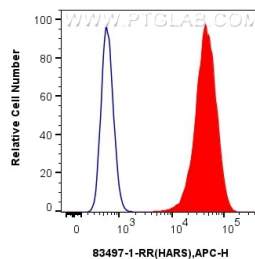
MCF-7, HeLa and HEK-293 cell lysates were measured. The human HARS concentration of detected samples was determined to be 579.62 ng/mL (based on a 4.3 mg/mL extract load) in MCF-7 cell lysate, 830.79 ng/mL (based on a 3.6 mg/mL extract load) in HeLa cell lysate and 698.03 ng/mL (based on a 3.4 mg/mL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



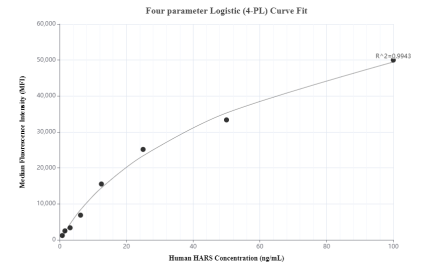
Immunofluorescent analysis of (4% PFA) fixed MCF-7 cells using HARS antibody (83497-1-RR, Clone: 240495C1) at dilution of 1:1000 and CoraLite@488-Conjugated Goat Anti-Rabbit IgG(H+L) (SA00013-2). This data was developed using the same antibody clone with 83497-1-PBS in a different storage buffer formulation.



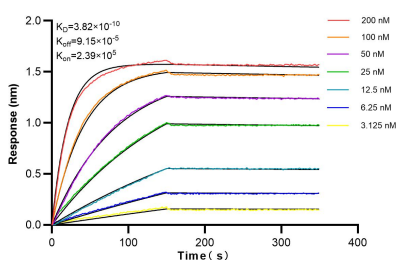
Immunofluorescent analysis of (4% PFA) fixed MCF-7 cells using HARS antibody (83497-1-RR, Clone: 240495C1) at dilution of 1:250 and CoraLite@488-Conjugated AffiniPure Goat Anti-Rabbit IgG(H+L) (SA00013-2). This data was developed using the same antibody clone with 83497-1-PBS in a different storage buffer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



1×10^6 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.