

For Research Use Only

# IARS2 Recombinant antibody, PBS Only (Capture)

Catalog Number: 84764-3-PBS



## Basic Information

<b>Catalog Number:</b> 84764-3-PBS	<b>GenBank Accession Number:</b> BC010218	<b>Purification Method:</b> Protein A purification
<b>Size:</b> 100ug , Concentration: 1 mg/ml by Nanodrop;	<b>GeneID (NCBI):</b> 55699	<b>CloneNo.:</b> 242219C5
<b>Source:</b> Rabbit	<b>UNIPROT ID:</b> Q9NSE4	
<b>Isotype:</b> IgG	<b>Full Name:</b> isoleucyl-tRNA synthetase 2, mitochondrial	
<b>Immunogen Catalog Number:</b> AG10696	<b>Calculated MW:</b> 1012 aa, 114 kDa	
	<b>Observed MW:</b> 114 kDa	

## Applications

**Tested Applications:**  
WB, IF/ICC, FC (Intra), Cytometric bead array, Sandwich ELISA, Indirect ELISA, Sample test

**Species Specificity:**  
human, mouse, rat

## Product Information

84764-3-PBS targets IARS2 as part of a matched antibody pair.

MP01543-1: 84764-3-PBS capture and 84764-2-PBS detection (validated in Cytometric bead array)

MP01543-2: 84764-3-PBS capture and 84764-1-PBS detection (validated in Cytometric bead array)

MP01543-3: 84764-3-PBS capture and 84764-4-PBS detection (validated in 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

Aminoacyl-tRNA synthetases catalyze the aminoacylation of tRNA by their cognate amino acid. Because of their central role in linking amino acids with nucleotide triplets contained in tRNAs, aminoacyl-tRNA synthetases are thought to be among the first proteins that appeared in evolution. Two forms of isoleucine-tRNA synthetase exist, a cytoplasmic form and a mitochondrial form. This gene encodes the mitochondrial isoleucine-tRNA synthetase which belongs to the class-I aminoacyl-tRNA synthetase family.

## Storage

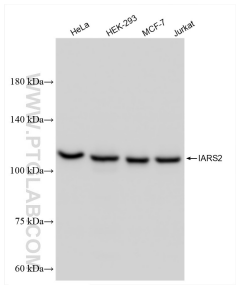
**Storage:**  
Store at -80°C.

**Storage Buffer:**  
PBS Only

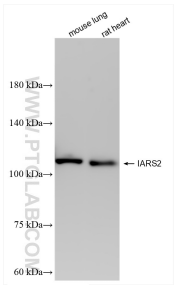
For technical support and original validation data for this product please contact:  
T: 1 (888) 4PTGLAB (1-888-478-4522) (toll free in USA), or 1(312) 455-8498 (outside USA)  
E: proteintech@ptglab.com  
W: ptglab.com

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

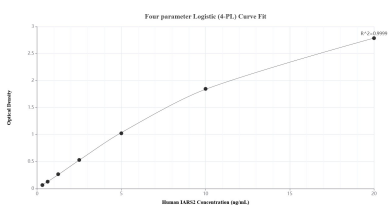
Selected Validation Data



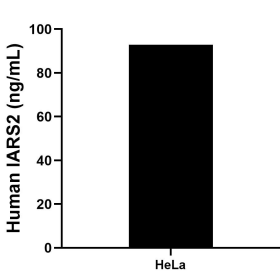
Various lysates were subjected to SDS PAGE followed by western blot with 84764-3-RR (IARS2 antibody) at dilution of 1:10000 incubated at room temperature for 1.5 hours. This data was developed using the same antibody clone with 84764-3-PBS in a different storage buffer formulation.



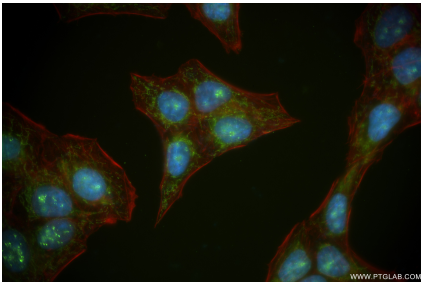
Various lysates were subjected to SDS PAGE followed by western blot with 84764-3-RR (IARS2 antibody) at dilution of 1:10000 incubated at room temperature for 1.5 hours. This data was developed using the same antibody clone with 84764-3-PBS in a different storage buffer formulation.



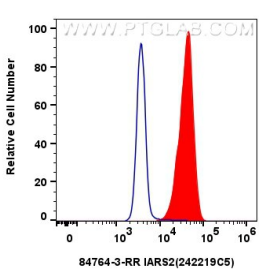
Sandwich ELISA standard curve of MP01543-3, Human IARS2 Recombinant Matched Antibody Pair - PBS only. 84764-3-PBS was coated to a plate as the capture antibody and incubated with serial dilutions of standard Ag10696. 84764-4-PBS was HRP conjugated as the detection antibody. Range: 0.313-20 ng/mL



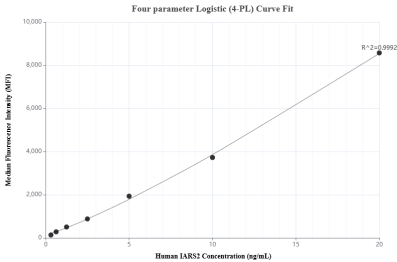
The mean IARS2 concentration was determined to be 92.84 ng/mL in HeLa cell extract based on a 1.00 mg/mL extract load.



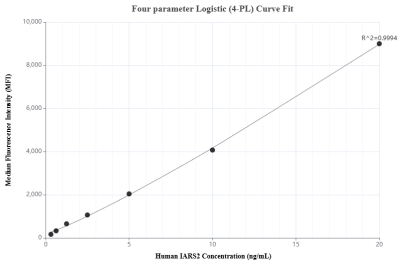
Immunofluorescent analysis of (4% PFA) fixed HepG2 cells using IARS2 antibody (84764-3-RR, Clone: 242219C5 ) at dilution of 1:500 and CoraLite@488-Conjugated Goat Anti-Rabbit IgG(H+L) (SA00013-2), CL594-Phalloidin (red). This data was developed using the same antibody clone with 84764-3-PBS in a different storage buffer formulation.



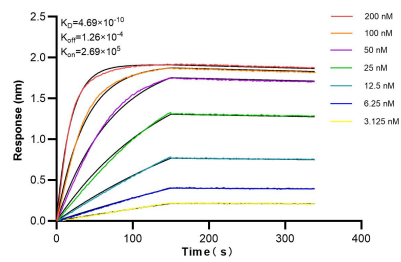
1x10<sup>6</sup> HepG2 cells were intracellularly stained with 0.25 ug IARS2 Recombinant antibody (84764-3-RR, Clone:242219C5) and CoraLite@488-Conjugated Goat Anti-Rabbit IgG(H+L) (SA00013-2)(red), or 0.25 ug Rabbit IgG Isotype Control Recombinant Antibody (98136-1-RR, Clone: 240953C9) (blue). Cells were fixed with 4% PFA and permeabilized with Flow Cytometry Perm Buffer (PF00011-C). This data was developed using the same antibody clone with 84764-3-PBS in a



Cytometric bead array standard curve of MP01543-2, IARS2 Recombinant Matched Antibody Pair, PBS Only. Capture antibody: 84764-3-PBS. Detection antibody: 84764-1-PBS. Standard: Ag10696. Range: 0.313-20 ng/mL



Cytometric bead array standard curve of MP01543-1, IARS2 Recombinant Matched Antibody Pair, PBS Only. Capture antibody: 84764-3-PBS. Detection antibody: 84764-2-PBS. Standard: Ag10696. Range: 0.313-20 ng/mL



Bi-layer interferometry (BLI) kinetic assays of 84764-3-RR against Human IARS2 were performed. The affinity constant is 0.469 nM.